Final Report

VOLUME II - FIELD SURVEY FORMS

FEASIBILITY STUDY FOR HVAC UPGRADE FORT RILEY, KANSAS

ENERGY ENGINEERING ANALYSIS PROGRAM (EEAP)

Prepared for

U.S. Army Corps of Engineers Kansas City District Kansas City, Missouri

Under

Contract No. DACA01-94-D-0033 Delivery Order 0005 EMC No. 1406-005

Approved for public released

Distribution Unlimited

August 1995

Ву

E M C Engineers, Inc. 2750 S. Wadsworth, Suite C-200 Denver, Colorado 80227 303/988-2951

19971016 191

DEPARTMENT OF THE ARMY

CONSTRUCTION ENGINEERING RESEARCH LABORATORIES, CORPS OF ENGINEERS P.O. BOX 9005

CHAMPAIGN, ILLINOIS 61826-9005

REPLY TO ATTENTION OF:

TR-I Library

17 Sep 1997

Based on SOW, these Energy Studies are unclassified/unlimited. Distribution A. Approved for public release.

Marie Wakeffeld, Librarian Engineering

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94
PREPARED BY: AJN/CWW

LOCATION: FT. RILEY, KS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0200 BLDG NAME: ADMIN GENERAL PURP

GAS METER: Y

CONDITIONED SQFT: 60,690

SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 2

MON: WED: THUR: FRI: SUN: TUE: PRES START: 0 0 0 0 0 0 PRES STOP: 24 24 7 0 7. 7 7 7 0 REQ START: 0 REQ STOP: 17 17 17

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER: 02 AHU NUMBER: HF		AHU LOCATION: ZONE PERIM	IETER
REFRIG SYS # SRVNG AHU:		SERVES AREA: BASEMENT	
REPROOF OF SIGNO AND.		AREA HEATED:	20
	78 OF BLDG 7	ANEA HEATED.	
AHU UNIT TYPE HEAT PUMP)	NUMBER OF ZONE	ES IF MZ UNIT: 0
CFM-HTG:	11,270	CFM-CLG: 1	1,270
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			<u></u>
UNIT MFG:	A.F.	UNIT MODEL:	
SUPPLY FAN HP:	3.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	- R	ET/EXH FAN MTR MODEL:	MAIN, MARANA ARMINISTRA WARREN SANTON CONTROL OF THE CONTROL OF TH
COMMENTS:			:
COILS	4444		
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: NON	IE		
HEATING COIL: NON	IE.		
REHEAT COIL: NON	lE		
HUMIDIFIER: NON	E		
COOLING COIL: DX			
SCHEDULE			
		MONTH SCHE	DULE NO: 3
	2	MONTH SCHE	DULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS:			DULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON	: TUE: WED: THU	R: FRI: SAT:	DULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0	: TUE: WED: THU	R: FRI: SAT: 0 0 0	EDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2	1: TUE: WED: THU 0 0 0 4 24 24	R: FRI: SAT: 0 0 0 24 24 24	DULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 REQ START: 0	1: TUE: WED: THU 0 0 0 4 24 24 7 7 7	R: FRI: SAT: 0 0 0 24 24 24 7 7 0	DULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2	l: TUE: WED: THU 0 0 0 4 24 24 7 7 7	R: FRI: SAT: 0 0 0 24 24 24	DULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR:	1: TUE: WED: THU 0 0 0 4 24 24 7 7 7	R: FRI: SAT: 0 0 0 24 24 24 7 7 0	NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON:	1: TUE: WED: THU 0 0 0 4 24 24 7 7 7 17 17 APR: MAY: JUN:	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON:	l: TUE: WED: THU 0 0 0 0 4 24 24 7 7 7 7 17 17	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON: CONTROLS	: TUE: WED: THU 0	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON: CONTROLS TYPE OF CONTROLS	: TUE: WED: THU	R: FRI: SAT: 0 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON:	: TUE: WED: THU 0	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON: CONTROLS TYPE OF CONTROLS	: TUE: WED: THU 0	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON: TYPE OF CONTROLS PRESENT TEMP WINTR OCC PRESENT TEMP WINTR UNOCC	: TUE: WED: THU	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON:	: TUE: WED: THU	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 11 MONTHS JAN: FEB: MAR: ON:	: TUE: WED: THU	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON:	: TUE: WED: THU	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0 0
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON:	: TUE: WED: THU	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0 0 EMAND LIMIT CNTRLS? TIME CLOCK:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON:	TUE: WED: THU O	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0 EMAND LIMIT CNTRLS? TIME CLOCK:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON PRES START: 0 PRES STOP: 24 2 REQ START: 0 REQ STOP: 0 1 MONTHS JAN: FEB: MAR: ON:	: TUE: WED: THU	R: FRI: SAT: 0 0 0 24 24 24 7 7 0 17 17 0 JUL: AUG: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0 0 EMAND LIMIT CNTRLS? TIME CLOCK:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LIENT CONTRACT NO: DACA 01-94-D-00

LOCATION: FT. RILEY, KS

DATE: 10/18/94
PREPARED BY: AJN/CWW

BUILDING NUMBER: IP-2 REFRIG SYS # SRVNG AHU: SERVES AREA: NORTH WING 1ST FLR ## OF BLDG AREA HEATED: 10 AHU UNIT TYPE HEAT PUMP NUMBER OF ZONES IF MZ UNIT: 0 COFM-HTG: 6.660 CFM-CLG: 6.660 MAX # OA: 0 NAMEPLATE UNIT MFG: UNIT MODEL: CFM-CLG: 6.660 MAX # OA: 0 NAMEPLATE UNIT MFG: UNIT MODEL: CFM-CLG:			** * **								
### WOF BLOG AREA HEATED: 10 AHU UNIT TYPE HEAT PUMP					AHU L	OCATION	I: ZONE F	PERIME	TER	1	
### WOF BLOG AREA HEATED: 10 AHU UNIT TYPE HEAT PUMP		DEEDIG SVS # SDVNG AL	411.		SERVE	SARFA	NORTH V	VING 15	STFIR		
CFM-HTG:		REFRIG 515 # SKVNG AI		% OF			TOKITY .	VIIIO IC		10	
MIN %OA: O		AHU UNIT TYPE HEAT	PUMP		:	NL	IMBER OF	ZONES	IF MZ (JNIT:	<u> </u>
NAMEPLATE UNIT MFG:	•	CFM-HTG:		6,660	CF	M-CLG:	:	6,	660		
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS: COIL COIL COIL COIL COIL COIL NONE HEATING COIL: NONE HEATING COIL: NONE HUMDIPITER: COOLING COIL: DX COOLING COIL: DX SCHEDULE DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		MIN %OA:		0	MA	X %OA:			0		
SUPPLY FAN HP: 2	N	IAMEPLATE									
SUPPLY FAN HP: 2		UNIT MFG:			:	UNI	IT MODEL:				
SUPPLY FAN MTR MODEL:		SUPPLY FAN HP:		2		RET/EX	H FAN HP:			0	
COILS Coil		SUPPLY FAN MTR MFG:			RET/E	XH FAN	MTR MFG:				
COIL		SUPPLY FAN MTR MODEL:			RET/EXH	FAN MT	R MODEL:				
Coil Coil Type Modulating Valve?		COMMENTS:								<u>:</u>	
PREHEAT COIL: NONE	C	OILS									
HEATING COIL: NONE		Coil	C	oil Type	Mo	dulating	Valve?				
REHEAT COIL: HUMIDIFIER: COOLING COIL: DX		PREHEAT COIL:	NONE								
HUMIDIFIER: NONE		HEATING COIL:	NONE								
DX		REHEAT COIL:	NONE								
DAY SCHEDULE NO: 2		HUMIDIFIER:	NONE								
DAY SCHEDULE NO: 2		COOLING COIL:	DX		□						
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	S	CHEDULE									
SUN: MON: TUE: WED: THUR: FRI: SAT:		DAY SCHEDULE NO:	2				MONTH	SCHED	ULE NO):	3
PRES START: 0 0 0 0 0 0 0 PRES STOP: 24		SCHEDULE COMMENTS:									_
PRES STOP: 24	_	SUN:	MON:	TUE: WED	: THUR:	FRI:	SAT:				•
REQ START: 0 7 7 7 7 7 7 0 REQ STOP: 0 17 17 17 17 17 0 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: □ </td <td></td> <td>PRES START: 0</td> <td> ;</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		PRES START: 0	;		0						
REQ STOP: 0 17 17 17 17 10 MONTHS ON: JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: CONTROLS Image: Dec of the control of the contr			24								
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:			7 =								
ON:		REQ STOP: 0	17	17. 17	<u>1/</u> ;	17: :	<u> </u>				
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: 0 PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0 PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0 PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEGRIP: 0 MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N MAX OA DMPR CONTROL: N ECONOMIZER DB CONTROL: N TIME CLOCK: N EXH AIR DMPR CONTROL: N TIME CLOCK OPERATIONAL? N	٨	MONTHS JAN: FEB:	MAR: A	PR: MAY:	JUN: JUL:	AUG:	SEP: (DCT:	NOV:	DEC:	-
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: 0 PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0 PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0 PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0 MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N ECONOMIZER DB CONTROL: N TIME CLOCK: N ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N		ON:		\boxtimes		\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	•
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: O OTHER SETPOINT DESCRIP: PRESENT TEMP SUM UNOCC: O OTHER SETPOINT DEG F: O MIXED AIR DMPR CONTROL: N MIXED AIR DMPR CONTROL: N ECONOMIZER DB CONTROL: N TIME CLOCK: N ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?	C	ONTROLS									
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: O O MIXED AIR DEG F: O MIXED AIR DEG F: O O OTHER SETPOINT DESCRIP: O MIN OA DMPR CONTROL: MAX OA DMPR CONTROL: N RET AIR DMPR CONTROL: N ECONOMIZER WB CONTROL: N TIME CLOCK: N ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N		TYPE OF CONT	ROLS:	ELECTRIC		THERM	IOSTAT TY	PE: S	INGLE S	SETPOINT	
PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: O OTHER SETPOINT DESCRIP: O OTHER SETPOINT DEG F: O OTHER SETPOINT DE		PRESENT TEMP WINTE	ROCC:		0						
PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0 MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N ECONOMIZER DB CONTROL: N TIME CLOCK: N ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N EXH AIR DMPR CONTROL: N			7					<u> </u>			
MAX OA DMPR CONTROL: N ECONOMIZER DB CONTROL: N TIME CLOCK: N RET AIR DMPR CONTROL: N ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N EXH AIR DMPR CONTROL: N			·					<u> </u>		0	
RET AIR DMPR CONTROL: N ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N EXH AIR DMPR CONTROL: N		MIN OA DMPR CONTROL	.: N	MIXED AIR I	DMPR CONTRO	L: N	IMPLEM	ENT DE	MAND	LIMIT CNT	RLS? N
EXH AIR DMPR CONTROL: N		MAX OA DMPR CONTROL	: N	ECONOMIZE	ER DB CONTRO	DL: N				TIME CLO	OCK: N
		RET AIR DMPR CONTROL	.: N	ECONOMIZE	R WB CONTRO	DL: N		TIME C	LOCK C	PERATION	IAL? N
OTHER CONTROLS DESCR:		EXH AIR DMPR CONTROL	.: N								
CONTROL & COMMENTS:			⊢								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/18/94
PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER		AHL	LOCATION:	ZONE PERIM	IFTER		
REFRIG SYS # SRVNG AF			/ES AREA: S				
KEI KIG 515 # SKVNG AI		% OF BLDG AREA	=	OOTTWING	STILK	10	
AHU UNIT TYPE HEAT	PUMP		NUM	BER OF ZONE	S IF MZ UN	NIT: 0	
CFM-HTG:	5,9	10	CFM-CLG:		5,910		
MIN %OA:		0	MAX %OA:		0		
NAMEPLATE							
UNIT MFG:			ו דואט	MODEL:			
SUPPLY FAN HP:		2	RET/EXH F	AN HP:		0	
SUPPLY FAN MTR MFG:			T/EXH FAN MT	-		Mileston a real series	
SUPPLY FAN MTR MODEL: COMMENTS:		RET/E	XH FAN MTR I	MODEL:		-	
	<u>:</u>						
COILS		**************************************					_
Coil	Coil Type		Modulating Va —	lve?			
PREHEAT COIL:	NONE	:	4				
HEATING COIL: REHEAT COIL:	NONE		╣				
HUMIDIFIER:			╡				
COOLING COIL:			=				
SCHEDULE		···					
DAY SCHEDULE NO: SCHEDULE COMMENTS:	2			MONTH SCHE	DULE NO:	3	
SUN:	MON: TUE:	WED: THUR:	FRI: SA	T:		:	
PRES START: 0	0 0	0 0	0	0		:	
PRES STOP: 24	24 24	24 24	24	24		:	
REQ START: 0	7 7	7 7	7	0			
REQ STOP: 0	17 17	17 17	17	0			
	MAR: APR: MA	Y: JUN: JUL	.: AUG: S	EP: OCT:	NOV: [DEC:	
ON:							
CONTROLS							
TYPE OF CONT	ROLS: ELECTRIC				SINGLE SE		
PRESENT TEMP WINTE	≀ occ:	0		ECK DEG F: ECK DEG F:	!	0	
PRESENT TEMP WINTR U	NOCC:	<u>O</u>		AIR DEG F:		0	
PRESENT TEMP SUN	A OCC:	0 OT	HER SETPOIN	T DESCRIP:			
PRESENT TEMP SUM U	NOCC:	0 0	THER SETPO	INT DEG F:		0	
MIN OA DMPR CONTROL	.: N MIXED	AIR DMPR CONT	ROL: N I	MPLEMENT D	EMAND LI	MIT CNTRLS?	N
MAX OA DMPR CONTROL		OMIZER DB CONT	ROL: N		•	TIME CLOCK:	N
RET AIR DMPR CONTROL		OMIZER WB CONT	ROL: N	TIME	CLOCK OP	ERATIONAL?	N
EXH AIR DMPR CONTROL	.: N						
OTHER CONTROLS D						i	
CONTROLS COMM	E1113.					1	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER:	0200		
AHU NUMBER:	HP-4	AHU LOCATION: ZONE PERIM	ETER
REFRIG SYS # SRVNG AHL		SERVES AREA: NORTHWING 21	
	% OF BLDG	S AREA HEATED:	10
AHU UNIT TYPE HEAT P	UMP	NUMBER OF ZONE	S IF MZ UNIT: 0
CFM-HTG:	8,470	CFM-CLG:	3,470
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	2.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	DX		
SCHEDULE			
DAY SCHEDULE NO:	2	MONTH SCHE	DULE NO: 3
SCHEDULE COMMENTS:			:
SUN: I	MON: TUE: WED: TH	IUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	7 7 7	7 7 0	•
REQ STOP: 0	17 17 17	17 17 0	
MONTHS JAN: FEB: M	AR: APR: MAY: JUN:	JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
121 121 1			
CONTROLS			
		THERMOSTAT TYPE:	SINGLE SETPOINT
CONTROLS	OLS: ELECTRIC	THERMOSTAT TYPE: HOT DECK DEG F:	SINGLE SETPOINT
CONTROLS TYPE OF CONTR	OLS: ELECTRIC OCC: 0	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F:	SINGLE SETPOINT 0 0
CONTROLS TYPE OF CONTR PRESENT TEMP WINTR UN	COLS: ELECTRIC OCC: 0 OCC: 0	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F:	SINGLE SETPOINT
CONTROLS TYPE OF CONTR PRESENT TEMP WINTR	OCC: 0 OCC: 0 OCC: 0	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F:	SINGLE SETPOINT 0 0
CONTROLS TYPE OF CONTR PRESENT TEMP WINTR UN PRESENT TEMP SUM PRESENT TEMP SUM UN	COLS: ELECTRIC OCC: 0 OCC: 0 OCC: 0	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	SINGLE SETPOINT 0 0 0 0
TYPE OF CONTR PRESENT TEMP WINTR OF PRESENT TEMP WINTR UN PRESENT TEMP SUM PRESENT TEMP SUM UN MIN OA DMPR CONTROL:	OLS: ELECTRIC OCC: 0 OCC: 0 OCC: 0 OCC: 0 MIXED AIR DMPR	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: CONTROL: N IMPLEMENT D	SINGLE SETPOINT 0 0 0 0 0 EMAND LIMIT CNTRLS?
TYPE OF CONTR PRESENT TEMP WINTR OF PRESENT TEMP WINTR UN PRESENT TEMP SUM PRESENT TEMP SUM UN MIN OA DMPR CONTROL: MAX OA DMPR CONTROL:	OLS: ELECTRIC OCC: 0 OCC: 0 OCC: 0 OCC: 0 MIXED AIR DMPR N ECONOMIZER DB	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: CONTROL: N IMPLEMENT DESCRIP:	SINGLE SETPOINT 0 0 0 0 0 EMAND LIMIT CNTRLS? N TIME CLOCK: N
TYPE OF CONTR PRESENT TEMP WINTR OF PRESENT TEMP WINTR UN PRESENT TEMP SUM PRESENT TEMP SUM UN MIN OA DMPR CONTROL:	OLS: ELECTRIC OCC: 0 OCC: 0 OCC: 0 N MIXED AIR DMPR N ECONOMIZER DB N ECONOMIZER WB	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: CONTROL: N IMPLEMENT DESCRIP:	SINGLE SETPOINT 0 0 0 0 0 EMAND LIMIT CNTRLS?
TYPE OF CONTR PRESENT TEMP WINTR OF PRESENT TEMP WINTR UN PRESENT TEMP SUM PRESENT TEMP SUM UN MIN OA DMPR CONTROL: MAX OA DMPR CONTROL: RET AIR DMPR CONTROL:	OLS: ELECTRIC OCC: 0 OCC: 0 OCC: 0 OCC: 0 MIXED AIR DMPR N ECONOMIZER DB N ECONOMIZER WB	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: CONTROL: N IMPLEMENT DESCRIP:	SINGLE SETPOINT 0 0 0 0 0 EMAND LIMIT CNTRLS? N TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER		OCATION: ZONE PERIMETER
REFRIG SYS # SRVNG A	% OF BLDG AREA H	S AREA: SOUTH WING 2ND FLR IEATED: 10
AHU UNIT TYPE HEAT	PUMP	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	7,480 CF	FM-CLG: 7,480
MIN %OA:	0 MA	XX %OA: 0
NAMEPLATE		
UNIT MFG:		UNIT MODEL:
SUPPLY FAN HP:	2	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:		EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: COMMENTS:		FAN MTR MODEL:
COILS		
Coil	Coil Type Mo	dulating Valve?
PREHEAT COIL:	NONE	
HEATING COIL:	NONE	
REHEAT COIL:		
HUMIDIFIER:		
COOLING COIL:	DX L	
CHEDULE		
DAY SCHEDULE NO:	2	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN:	MON: TUE: WED: THUR:	FRI: SAT:
PRES START: 0	000	0 0
PRES STOP: 24	24 24 24 24	24 24
REQ START: 0 REQ STOP: 0	$\frac{7}{17} = \frac{7}{17} $	$\frac{7}{17} = \frac{0}{1}$
REQ STOP: 0	17 17 17 17	0
ON:	MAR: APR: MAY: JUN: JUL:	AUG: SEP: OCT: NOV: DEC:
CONTROLS		
TYPE OF CONT	TROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPOINT
TYPE OF CONT	IROLS. ELECTRIC	HOT DECK DEG E:
PRESENT TEMP WINTE	R OCC: 0	HOT DECK DEG F: 0 COLD DECK DEG F: 0
	R OCC: 0	HOT DECK DEG F: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP WINTE PRESENT TEMP WINTR U PRESENT TEMP SUM	R OCC: 0 UNOCC: 0 OTHE	COLD DECK DEG F: 0 MIXED AIR DEG F: 0 R SETPOINT DESCRIP:
PRESENT TEMP WINTE PRESENT TEMP WINTR U PRESENT TEMP SUM PRESENT TEMP SUM U	R OCC: 0 UNOCC: 0 M OCC: 0 UNOCC: 0 OTHE	COLD DECK DEG F: 0 MIXED AIR DEG F: 0 R SETPOINT DESCRIP: 0 HER SETPOINT DEG F: 0
PRESENT TEMP WINTE PRESENT TEMP WINTR U PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL	R OCC: 0 INOCC: 0 M OCC: 0 OTHE INOCC: 0 OTHE INOCC: 0 OTHE	COLD DECK DEG F: 0 MIXED AIR DEG F: 0 R SETPOINT DESCRIP: 0 DL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
PRESENT TEMP WINTE PRESENT TEMP WINTR U PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL	R OCC: 0 UNOCC: 0 M OCC: 0 UNOCC: 0 OTHE UN	COLD DECK DEG F: 0 MIXED AIR DEG F: 0 R SETPOINT DESCRIP: 0 HER SETPOINT DEG F: 0 DL: N IMPLEMENT DEMAND LIMIT CNTRLS? N TIME CLOCK: N
PRESENT TEMP WINTE PRESENT TEMP WINTR U PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL	R OCC: 0 UNOCC: 0 M OCC: 0 OTHE UNOCC: 0 OTHE UNOCC: 0 OTHE L: N MIXED AIR DMPR CONTRO L: N ECONOMIZER DB CONTRO L: N ECONOMIZER WB CONTRO	COLD DECK DEG F: 0 MIXED AIR DEG F: 0 R SETPOINT DESCRIP: 0 HER SETPOINT DEG F: 0 DL: N IMPLEMENT DEMAND LIMIT CNTRLS? N TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

		G NUMBER					AUILL	OCATION	I. 70N	E DEDIA	/ETED		
	AH	U NUMBEF	t: HP-6)		' =-					HEIER		
REFR	IG SYS #	SRVNG A	łU:		0/ 6			AREA:	AUDIT	ORIUM	 	27	:
					% C	OF BLDG	AKEA H	EATED.					
AHU	UNIT TY	PE HEAT	PUMP					NU	JMBER (OF ZON	ES IF MZ	UNIT:	0
	(CFM-HTG:			8,000		CF	M-CLG:			8,000		
	ı	MIN %OA:			13		MA	X %OA:			13		
NAME	PLAT	Έ											
	U	INIT MFG:						UN	IT MODE	EL:			
	SUPPLY	FAN HP:			4			RET/EX	H FAN F	IP:		0	
SUPP	LY FAN I	MTR MFG:					RET/E	XH FAN	MTR MF	G:			
SUPPLY	FAN MT	R MODEL:			!		RET/EXH	FAN MT	R MODE	EL:			,
	co	MMENTS:	:								····		
COILS	,												
	Co	oil		Coil Typ	е		Мо	dulating	Valve?				
	PREH	EAT COIL:	NONE										
	HEAT	ING COIL:	NONE				_ 📙						
		EAT COIL:	NONE				_ ;						
		MIDIFIER:					_						
	COOL	ING COIL:	DX										
SCHE	DULE		_										
DAY	SCHEDU	JLE NO:	2						MON	гн ѕсні	EDULE N	0:	3
SCHEDU	JLE COM	MENTS:											
		SUN:	MON:	TUE:	WE	D: TH	UR:	FRI:	SAT:				
	START:	0	0	0		<u> </u>	0		0				*
	S STOP:	24	24	24		24	24	24	24				
	START:		7	7	:	7	7	$\frac{7}{17} =$	0				
REC	STOP:	0	17	17		17	17	17	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes								
CONT	ROLS	3			·								
	TYPE	E OF CONT	ROLS:	ELECTI	RIC			••••	IOSTAT		SINGLE	SETPOII	
PRI	ESENT TE	MP WINTE	R OCC:			0			DECK				0
PRESI	ENT TEM	P WINTR U	NOCC:			0			DECK I		—		0
	PESENT	TEMP SU	N OCC:			0	OTHE	R SETPO					
		MP SUM U				0		HER SET					0
MIN (OA DMPR	CONTROL	.: N	MIX	(ED All	R DMPR	CONTRO	L: N	IMPLE	MENT I	DEMAND	LIMIT CI	NTRLS?
MAX	OA DMPR	CONTROL	.: N	EC	ONOM	ZER DB	CONTRO	DL: N				TIME	сьоск: [
RET A	IR DMPR	CONTROL	.: N	ECC	ONOMI	ZER WB	CONTRO	DL: N		TIME	CLOCK	OPERAT	IONAL?
EXH A	IR DMPR	CONTROL	.: N										
0	THER CO	NTROLS D	ESCR:										
•		OLS COMM											

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING	NUMBER:	0200				E	BOILER F	RM LOCA	ATION:	MER BA	SEMENT	
BOILER (JNIT											
			BLR/COM	IVERTER	SERVE	SARE	A OR SE	RVICE:	ALL			
SOURCE C	OF BLDG HE	AT										
. ● 🔯 <u>B</u> O	ILER					_ <u>cc</u>	NVERTE	R				
BOI	LER TAG:	BLR-1				CON	VERTER	TAG:				
1	ER TYPE:		S STEAM (1	5# TO 125#			ERTER 1	_				
FU	IEL TYPE:	NAT. GAS				CONV	HT SOU	IRCE:				
CENTR	RAL PLANT D	IRECT										
NAMEPL	ATE				% ARE	A HE	ATED BY	BB RAD	DIATION:			C
BOILER MFG	: KEWANE				В	LR CA	P OUTP	UT (BTU	H):		2,050,000)
UNIT MODEL:	M-205-KX					BLR (CAP INP	UT (BTU	H):		2,562,500)
COMMENTS	:		~~~									_
SCHEDUI	LE		· · · · · · · · · · · · · · · · · · ·									
		40								=		
DAYS SCHEI	=	10	**********					MONTE	SECHD	ULE NO	: [3
	L											
DDEC CTAD	SUN:	MON:	TUE:	WED:	THUR		FRI:	SAT:				
PRES STAR		24	0 24	24	2	0	0 	0 24				
REQ STAR		0	0	0		<u> </u>	0					
REQ STO		24	24	24	24		24	24				i
												i
	N: FEB:	MAR:	APR:	MAY:	JUN: .	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	3	Σ	\square		\boxtimes	,						
CONTRO	LS				****							
TYPE	OF BLR CO	NTROLS:	ELECTF	RIC				RESE	T CONTE	ROLS:	<u></u>	
	ERATING SE				EG F or I	PSIG					<u> </u>	
TYPE OF E	BURNER COM	NTROLS:				7						
CON	ITROLS CON	MENTS:				_1						
HW PUMI)											
PUMP TA	G: 1		PUMI	P HP:		50) F	UMP MF	G: MAI	RATHON		
PUMP SERVIC	E: CONDE	NSOR WA	TER PUN	IP .			PUN	IP MODE	L: TJ3	24TSTDF	R7001D N V	٧

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94
PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUM	BER: 0200			BOILER RM LOC	ATION:	MER BAS	EMENT	
BOILER UN	T							
SOURCE OF B	LDG HEAT	BLR/CONVE	RTER SERVES AI	REA OR SERVICE:				
BOILER BOILER BOILER 1 FUEL 1	TAG: BLR-2 TYPE: MED PR	ESS STEAM (15# T	COI 125#) COI	CONVERTER INVERTER TAG: IVERTER TYPE: IV HT SOURCE:				
CENTRAL	PLANT DIRECT							
NAMEPLAT	E		% AREA H	EATED BY BB RA	DIATION:			0
BOILER MFG: KI UNIT MODEL: M COMMENTS:	EWANEE -205-KX			CAP OUTPUT (BT			2,050,000	
SCHEDULE								
DAYS SCHEDULI SCHEDULE COMME	ENTS:				'H SECHD	ULE NO:		<u>3</u>
PRES START: PRES STOP: REQ START: REQ STOP:	0	N: TUE: 0 0 24 24 0 0 24 24 24 24	WED: THUR: 0 0 24 24 0 0 24 24	FRI: SAT: 0 0 24 24 0 0 24 24				
MONTHS JAN: ON:	FEB: MAR	: APR: MA			ост: ⊠	NOV:	DEC:	- -
CONTROLS								
OPERA TYPE OF BURN	BLR CONTROL TING SETPOIN NER CONTROL DLS COMMENT	S:	0 DEG F or PSI		ET CONTR	ROLS:		
HW PUMP								
PUMP TAG: PUMP SERVICE:	1 CONDENSOR	PUMP H	P:	50 PUMP N			ELECTRIC 7001DNW	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

PREPARED BY: AJN/CWW

DATE: 10/18/94

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER:	0200	BLI	OG NAME: ADM	MIN GENERAL P	URP	
REF. UNIT NUMBER	/TAG: CT-1			LOCATION (N	MER#): EAST OF	BLDG.
				AHU'S SE	RVED: ALL HEAT	PUMPS
	UNIT TYPE C	OOLING TOWER				
NAMEPLATE	ı 1					
CHILLER M	FG:			TOWER MFG:	AIRCOIL COMPAI	NY
CHILLER MOD			# OF	TOWER FANS:		2
CHILLER SERIAL I	NO:		-	TOWER FAN V:		480
CHILLEF		0	TOW	ER FAN AMPS:		3
CHILLER AM		0	TO	OWER FAN HP:		30
CHILLER		0				
CHILLER CAP (TON	IS): 	0				
COMMEN	TS:					
SCHEDULE						
DAYS SCHED	MARKET	10	M	ONTHS SCHEDU	LE NO: 3	
SCHEDULE COM	MMENIS:					
	SUN: MON:	TUE: WE		FRI: SAT:		:
PRES START:	0 0	0	0 0 =	0 0		:
REQ START:	24 0 0	24	$\frac{24}{0} = \frac{24}{0} =$	24 0 24		
REQ STOP:	24 24		24 	24 24		
	FEB: MAR:	APR: MAY:	JUN: JUL:	AUG: SEP:	OCT: NOV:	DEC:
ON:	\boxtimes		\boxtimes	\boxtimes	\boxtimes	\boxtimes
CONTROLS						
OOMINGEO						
TYPE OF CO	ONTROLS: EL	ECTRIC				
	SETPOINT:		<u>0</u> c	NWS SETPOINT	:	0
CWR	SETPOINT:			NWR SETPOINT	:	0
PRE	SS LITE HI: 🚺	TEM	PLITEHI: N	OTHER IN	DICATIORS:	
	LITE LOW:	_	ITE LOW: N			
PRESS	GAUGES: L	TEMP	GAUGES: N			
CONTROL	S COMMENTS:					
CW and CNW	PUMPS					
PUMP TAG: 1		PUMP HP:	5	PUMP MFG	: US ELECTRIC	
PUMP SERVICE: COC	DLING TOWER			PUMP MODEL		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94
PREPARED BY: AJN/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

				5	20 114 14	. ADL	UNI OFNI		IDD			
BLDG NUMBER	R: 0200		_	BLI	DG NAME	:: ADN	IIN GENE	ERAL PL	JRP			
REF. UNIT NUME	BER/TAG:	CT-2					LOCA	TION (M	IER#): N	ORTH O	F BLDG	
							AH	IU'S SEF	RVED: A	LL HEAT	PUMPS	
	UNIT 7	TYPE CO	OOLING T	OWER	}							
NAMEPLA.	I E											
CHILLE	R MEG.						TOWER	MFG:	EVAPÇO			
CHILLER N	=					# OF T	TOWER				1	
CHILLER SERI							OWER F				480	
	LER V:			0		TOWE	R FAN A	AMPS:			3	
CHILLER	22			0		тс	WER FA	N HP:			20	
CHILL	ER PH:			0								
CHILLER CAP (TONS):			0								
	_											
COMI	MENTS:											
SCHEDULE	=											
OOHEDOLI									_			
	HEDULE N		10			MC	NTHS S	CHEDUI	LE NO:	3		
SCHEDULE	COMMEN.	ΓS:										<u>:</u>
,	SUN:	MON:	TUE:	WE	D: THU	JR:	FRI:	SAT:				
PRES START:	0	0	0		0	0	0	0				
PRES STOP:	24	24	24		24	24	24	24				
REQ START:	0	0	0		0	0	0	0				
REQ STOP:	24	24	24		24	24	24	24				
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	:
ON:	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	
		ســـــــــــــــــــــــــــــــــــــ		انت								
CONTROL	2											
CONTROL												
TYPE O	F CONTRO	Ne. El	ECTRIC		·	-						
TIPEO	r CONTRO	JLS. EL	LOTRIC									
C	WS SETP	DINT:			0	CI	NWS SE	TPOINT:	<u> </u>		0	
CI	WR SETPO	DINT:			0	CI	NWR SE	TPOINT:			0	
F	RESS LIT	EHI: N	П	TEM	IP LITE H	ı: N	ОТ	HER IND	DICATIOR	S:		
	ESS LITE I				LITE LOW						i	
	ESS GAU		_		GAUGES							
	ROLS COM		_			بني ٠						
COMIT	.5_5 0011		<u> </u>									
CW and CN	W PL	IMPS										
DUMP TAC:	14		DUMB	D		1	DIJA	//P MFG:	CENTL	RY		
	COND WA	TED DI IN	PUMP H		7	1		MODEL:				
PUMP SERVICE:	COND WA	TER PUN	IF (CINVV)		_;		FUNIF	INOUEL:	0-1330	√2-4 I		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE:

200.XLS

	AIR I	HANDLIN	G UNIT - H	VAC UPGF	RADE O	BSERVA	TIONS		
AHU NO.:	AHU-1	LOCATIO	N (Rm)	AUDITORIUM	STAGE (L) WING			
NHU TYPE:	HEAT PUN	MP MFG.:	CLIMATEM	ASTER		MODEL:	V120-32	UASBTCOA	
SZ - Single Zone	H&V - Hea	ating & Vntltng].	:FC - Fan Coil ((Indicate 2F	for 2 Pipe or	4P for 4 Pip	oe)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		RHT - Reheat	,				
DD - Dual Duct	UH - Unit	Heater		IND - Induction	n System				
D.A. DAMPER	N/A: X	OK:	REPLACE:	[5	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	S	SIZE:	DPR-ACT	OK:	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	S	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	5	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	5	SIZE:	DPR-ACT	OK:	RP- ACT:	
OMMENTS:								DPR-ACT = Damp	er Actuator
								RP-ACT = Replace	e Actuator
ILTER SECTION	N/A:	OK: X	REPLACE:	[5	SIZE:				
COMMENTS:									
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARING	SS: IC	COMMENT	S:			
SUPPLY FAN MOTOR	OK: X	REPLACE	:	10	COMMENT	S:	<u> </u>		
NLET VANES	N/A: X	OK:	COMMENT	3:					
ETURN AIR FAN	OK:	REPLACE	FAN BEARING		COMMENT	S:	N/A		
RETURN FAN MOTOR	OK:	REPLACE			COMMENT				
COMMENTS:	!						·		
							** ***		
COOLING COIL	N/A:	OK: X	REPLACE:	Te	חשב.	ONITI MOV	Nov	IDD ACT	Inn nn
HEATING COIL	N/A:	OK: X	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK: X	REPLACE:		SIZE: SIZE:	CNTLVLV CNTLVLV	OK: OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
OMMENTS:	14/A. A	JOK.	INCPLACE.		DIZE.	CNILVLV			
OIVIIVIENTS.								RP-ACT = Replace	
W								RP-BD ≃ Reptace	Body
					······································				
HU PUMP MOTOR	N/A: X	OK:	REPLACE:	1	SIZE:				
HU PUMP SEALS	N/A: X	OK:	REPLACE:	5	SIZE:				
COMMENTS:	787	1-2-2							·
PIPE INSULATION	N/A:	OK: X	MISSING:			O QUANTITY:			
OUCT INSULATION	N/A: X	OK:	MISSING:	TE	STIMATE	O QUANTITY:			
COMMENTS:									

200

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

200

FILE:

200.XLS

			BLDG:	200	FILE: 200.XLS	
F	REFRIGE	RATION	EQUIPMENT	- HVAC UPGRADE C	BSERVATIONS	
CHILLER / EQUIP. NO.		CT-1	LOCATION (RN	A) EAST OF BUILDIN	G	
REFG. EQUIP. TYPE:		CT		LTIMORE AIR COIL MODI		
C-WCT = Centrifugal w/ V	Vater Side C	ooling Tower		ACCU = Reciprocating w/ Air 0		
R-WCT = Reciprocating w				SB-WCT = Absorption w/ Water	r Side Cooling Tower	
ACCU = Air Cooled Cond	lensing Unit		C	Γ = Cooling Tower		
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:						
COOLING TOWER	N/A:	OK: X	REPLACE:	SIZE:		
AIR COOLED COND.	N/A: X	OK:	REPLACE:	SIZE:		
COMMENTS:						
						,,,,,
CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUAI		
CHW PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUAI	NTITY:	
COMMENTS:						
OOMMETT O.	<u></u>					
					100 AT	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		,
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
CHW PUMP SEALS	N/A: X	ок:	REPLACE:	SIZE:		
COMMENTS:	CONDEN	SER WATER	PUMP - OK			
COMMENTS.	OONDER	OLI C WITCH EACH				****
	···········					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 10 Nov-94

CHECKED BY:

CWW AJN

BLDG:

200

FILE:

200.XLS

ļ ,	REFRIGE	RATION E	QUIPMENT - HVA	C UPGRADE OBSERVATIONS	
CHILLER / EQUIP. NO.		CT-2	LOCATION (RM)	NORTH OF BUILDING	
REFG. EQUIP. TYPE:		CT	MFG.: EVAPCO	MODEL: LSW-43C2	
C-WCT = Centrifugal w/ W			R-ACCU =	Reciprocating w/ Air Cooled Condensing Unit	******
R-WCT = Reciprocating w		Cooling Tower	ASB-WCT	= Absorption w/ Water Side Cooling Tower	
ACCU = Air Cooled Conde			CT = Cooli	ng Tower	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:				7944444	
COOLING TOWER	N/A:	JOK: X	REPLACE:	SIZE:	
AIR COOLED COND.	N/A: X	IOK:	REPLACE:	SIZE:	
COMMENTS:				VIII.	
		***************************************		- 1984 A. (1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1	
CHILLER INSUL.	N/A: X	IOK:	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A: X	OK:	MISSING:	IESTIMATED QUANTITY:	
COMMENTS:					
COMMULITIS.					
				14 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:		SER WATER PL			
			Jiii Ori		
		7-8-80			
		·			
					
			-		
		V			
					7-7-2-2-4

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE: 200.XLS

	BOILE	R & CON	VERTER - HVAC U	PGRADE OBSERVATIONS
BOILER/CONVERTER NO),	BLR-1,2	LOCATION (RM)	MER
BOILER TYPE:		STEAM	MFG.: KEWANEE	MODEL: M-205-KX
CONVERTER TYPE:	<u></u>		MFG.:	MODEL:
STM - Steam		- Steam to Hot		HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water	HTHW/HV	V - High Temp	HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSPI	HERIC:	POWER:	OK: REPLACE:
COMMENTS:	вотн во	ILERS THE S	AME. #2 BOILER IS RUST	ED NEAR TOP AND DOWN ONE SIDE.
BLR PUMP MOTOR	N/A: X	OK:	IREPLACE:	ISIZE:
BLR PUMP SEALS	N/A: X	IOK:	REPLACE:	SIZE:
COMMENTS:		1011.	THE BIOLE	JOEE.
COMMENTS.				
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A:	OK:	MISSING: X	ESTIMATED QUANTITY: 200' @ 2"
COMMENTS:	ON CR LI	NES & 25' @ 2	2-1/2". STEAM VALVE ABO	
		ILER CAUSIN		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
				I I I I I I I I I I I I I I I I I I I
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
CV INCLILATION	Ini/A · V	OK:	MISSING:	ESTIMATED QUANTITY:
CV INSULATION	N/A: X		IMISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A: X	OK:	IMISSING:	ESTIMATED QUANTITY,
COMMENTS:				
		<u>,</u>		

200

BLDG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/6/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/DEJ

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0222 BLDG NAME: ADMIN GEN PURP

GAS METER: N

SUSPECT ACM: Y

CONDITIONED SQFT: 18,85

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 56

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	11	7	7	7	7	7	10
REQ STOP:	17	17	20	20	20	20	19

REMARKS:

Commissary Administration - North part of building on 1st and 2nd floor. Building contact: Thelma Thompson at Ext 3627. Mobilization Operations - Center part of building. Liquor Store - North central part of building. Cold storage - South part of building. Suspect ACM in MER on HW piping

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/6/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/DEJ

BUILDING NUMBER: AHU NUMBER:	0222 AHII-1	AHU LOCATION: ATTIC	
			CTORE/OREDATIONS
REFRIG SYS # SRVNG AHU:	· · · · · · · · · · · · · · · · · · ·	SERVES AREA: LIQUOR S AREA HEATED:	510RE/OPERATIONS 60
AHU UNIT TYPE SINGLE 2	ZONE	NUMBER OF	ZONES IF MZ UNIT: 0
CFM-HTG:	9,800	CFM-CLG:	9,800
MIN %OA:	10	MAX %OA:	100
NAMEPLATE			
UNIT MFG: A	MERICAN BLOWER	UNIT MODEL	: 2A18
SUPPLY FAN HP:	5	RET/EXH FAN HP	: 0
SUPPLY FAN MTR MFG: B	ALDOR	RET/EXH FAN MTR MFG	
-	13218T	RET/EXH FAN MTR MODEL	:
COMMENTS:			:
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: N	IONE		
HEATING COIL: H		🗵	
REHEAT COIL: N		_	
HUMIDIFIER: N COOLING COIL: O	IONE		
COOLING COIL.	,vv		
SCHEDULE			
DAY SCHEDULE NO:	56	MONTH	SCHEDULE NO: 3
	56	MONTH	SCHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS:		MONTH	SCHEDULE NO: 3
DAY SCHEDULE NO:			SCHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS:	ION: TUE: WED: TH	IUR: FRI: SAT:	SCHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11	ION: TUE: WED: TH 0 0 0 24 24 24 7 7 7	IUR: FRI: SAT: 0 0 0 24 24 24 7 7 10	SCHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24	O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IUR: FRI: SAT: 0 0 0 24 24 24	SCHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MA	ION: TUE: WED: TH 0 0 0 24 24 24 7 7 7	IUR: FRI: SAT: 0 0 0 24 24 24 7 7 10 20 20 19	SCHEDULE NO: 3 OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17	NON: TUE: WED: THOU THOU THOU THOU THOU THOU THOU THOU	IUR: FRI: SAT: 0 0 0 24 24 24 7 7 10 20 20 19	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MA	NON: TUE: WED: THOU THOU THOU THOU THOU THOU THOU THOU	IUR: FRI: SAT: 0 0 0 24 24 24 7 7 10 20 20 19 JUL: AUG: SEP:	OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON: ON:	TUE: WED: THOU TO TO TO TO TO TO TO	UR: FRI: SAT:	OCT: NOV: DEC: \[\inc \sqrt{\sq}}\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON: ON: CONTROLS	ION: TUE: WED: TH	UR: FRI: SAT:	OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON: ON: CONTROLS TYPE OF CONTROL	ION: TUE: WED: TH	UR: FRI: SAT:	OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON: ON: TYPE OF CONTRO PRESENT TEMP WINTR OF	ON: TUE: WED: THOUSE THOUSE	UR: FRI: SAT:	OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON: ON: TYPE OF CONTROLS PRESENT TEMP WINTR O	ION: TUE: WED: TH	UR: FRI: SAT:	OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON: ON: TYPE OF CONTRO PRESENT TEMP WINTR UNC PRESENT TEMP SUM OF CONTROLS	ON: TUE: WED: THOUSE THOUSE	THERMOSTAT TO HOT DECK DE COLD DECK DE COTHER SETPOINT DECK DE COTHER SETPOINT DECK DE COTHER SETPOINT DECK DE COTHER SETPOINT DECK DECK DECK DECK DECK DECK DECK DECK	OCT: NOV: DEC: PPE: SINGLE SETPOINT G F: 0 G F: 0 RIP: 0 RIP: 0
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON:	ION: TUE: WED: TH	THERMOSTAT TO HOT DECK DE COLD DECK DE COLD TO CONTROL: N IMPLEM	OCT: NOV: DEC: PE: SINGLE SETPOINT G F: 0 G F: 0 RIP: 0 RIP: 0 ERIP: 0 ERIP: 0 ERIP: 0 ERIP: V
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON:	ION: TUE: WED: TH	THERMOSTAT TO HOT DECK DE CONTROL: N IMPLEM CONTROL: N IMPLEM CONTROL: N	OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON:	ION: TUE: WED: TH	THERMOSTAT TO HOT DECK DE CONTROL: N IMPLEM CONTROL: N IMPLEM CONTROL: N	OCT: NOV: DEC: PE: SINGLE SETPOINT G F: 0 G F: 0 RIP: 0 RIP: 0 ERIP: 0 ERIP: 0 ERIP: 0 ERIP: V
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: M PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 17 MONTHS JAN: FEB: MAON:	ION: TUE: WED: TH	THERMOSTAT TO HOT DECK DE CONTROL: N IMPLEM CONTROL: N IMPLEM CONTROL: N	OCT: NOV: DEC:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/6/94

PREPARED BY: AJN/DEJ

BOILER AND CONVERTER SURVEY OBSERVATIONS

BOILER UNIT SOURCE OF BLDG HEAT BLR/CONVERTER SERVES AREA OR SERVICE: ALL CONVERTER CONVERTER TAG: BOILER TAG: BLR-1 BOILER TAG: BLR-1 BOILER TYPE: MAT. GAS CONVERTER TAG: CONVERTAGE CONVERTER TAG: CONVERTER TAG: CONVERTER TAG: CONVERTER TAG:	BUILDING NUMBER: 0222	BOILER RM LOCATION: MER	
SOURCE OF BLOG HEAT SOURCE OF BLOG HEAT SOURCE OF BLOG HEAT BOILER TAG: BLR-1	BOILER UNIT		
■ BOILER CONVERTER TAG: BOILER TAG: BOILER TYPE: HW (UP TO 250 DEG) CONVERTER TAG: CONVERTER TYPE: FUEL TYPE: NAT. GAS CONVERTER TYPE:	BLR/CONVERTE	ER SERVES AREA OR SERVICE: ALL	
BOILER TAG: BURN-1			
BOILER TYPE: HW (UP TO 250 DEG) FUEL TYPE: NAT. GAS CENTRAL PLANT DIRECT NAMEPLATE **REA HEATED BY BB RADIATION: 100 BOILER MFG: BURNHAM BLR CAP OUTPUT (BTUH): 350,000 UNIT MODEL: FD/10 BLR CAP INPUT (BTUH): 434,000 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 56 MONTH SECHDULE NO: 1 PRES START: 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	● ⊠ BOILER	CONVERTER	
FUEL TYPE: NAT. GAS	BOILER TAG: BLR-1	CONVERTER TAG:	
CENTRAL PLANT DIRECT	BOILER TYPE: HW (UP TO 250 DEG)		
NAMEPLATE	FUEL TYPE: NAT. GAS	CONV HT SOURCE:	
## BOILER MFG: BURNHAM BLR CAP OUTPUT (BTUH): 350,000 ## UNIT MODEL: FD/10 BLR CAP INPUT (BTUH): 434,000 ## COMMENTS: SCHEDULE	CENTRAL PLANT DIRECT		:
UNIT MODEL: FD/10 BLR CAP INPUT (BTUH): 434,000 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 56 MONTH SECHDULE NO: 1 SCHEDULE COMMENTS:	NAMEPLATE	% AREA HEATED BY BB RADIATION:	100
SCHEDULE	BOILER MFG: BURNHAM	BLR CAP OUTPUT (BTUH): 350,000	-
DAYS SCHEDULE NO: 56	UNIT MODEL: FD/10	BLR CAP INPUT (BTUH): 434,000	_
DAYS SCHEDULE NO: 56	COMMENTS:		
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	SCHEDULE		
SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		MONTH SECHDULE NO:	1
PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24			
PRES STOP: 24			
REQ START:			
REQ STOP: 17 17 20 20 20 19 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: CONTROLS CONTROLS: ELECTRIC RESET CONTROLS: N OPERATING SETPOINT: 165 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS: N CONTROLS COMMENTS: HW PUMP PUMP MFG: B & G PUMP MFG: B & G PUMP MFG: B & G PUMP MODEL: UQN48517D1088M HW PUMP PUMP MFG: GE	The state of the s		
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ONTROLS CONTROLS TYPE OF BLR CONTROLS: ELECTRIC RESET CONTROLS: N OPERATING SETPOINT: 165 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS: PUMP MFG: B & G PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE			
CONTROLS TYPE OF BLR CONTROLS: ELECTRIC RESET CONTROLS: N OPERATING SETPOINT: 165 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE	NEGOTOT. 17 17 20		
CONTROLS TYPE OF BLR CONTROLS: ELECTRIC RESET CONTROLS: N OPERATING SETPOINT: 165 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP MODEL: UQN48517D1088M HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE	MONTHS JAN: FEB: MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:	 .
TYPE OF BLR CONTROLS: ELECTRIC RESET CONTROLS: N OPERATING SETPOINT: 165 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP PUMP MODEL: UQN48517D1088M HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE			1
TYPE OF BLR CONTROLS: ELECTRIC RESET CONTROLS: N OPERATING SETPOINT: 165 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP MODEL: UQN48517D1088M HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE			<u> </u>
OPERATING SETPOINT: 165 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP PUMP MODEL: UQN48517D1088M HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE	CONTROLS		
TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP PUMP MODEL: UQN48517D1088M HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE	TYPE OF BLR CONTROLS: ELECTRIC	RESET CONTROLS: N	
CONTROLS COMMENTS: HW PUMP PUMP TAG: 1	OPERATING SETPOINT: 165	DEG F or PSIG	
HW PUMP PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP MODEL: UQN48517D1088M HW PUMP PUMP MFG: GE	TYPE OF BURNER CONTROLS:		
PUMP TAG: 1 PUMP HP: 0.08 PUMP MFG: B & G PUMP SERVICE: HW PUMP PUMP MODEL: UQN48517D1088M HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE	CONTROLS COMMENTS:		
PUMP SERVICE: HW PUMP PUMP MODEL: UQN48517D1088M HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE	HW PUMP		
HW PUMP PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE	PUMP TAG: 1 PUMP HP:	0.08 PUMP MFG: B & G	
PUMP TAG: 2 PUMP HP: 0.13 PUMP MFG: GE	PUMP SERVICE: HW PUMP	PUMP MODEL: UQN48517D1088M	1
	HW PUMP		
	PUMP TAG: 2 PUMP HP:	0.13 PUMP MFG: GE	
		PUMP MODEL: 5KH32E6129AX	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

PUMP HP:

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/6/94

PREPARED BY: AJN/DEJ

BOILER AND CONVERTER SURVEY OBSERVATIONS

Н	W	1	P	П	٨	1	P
				u	14	18	

PUMP TAG: 3 PUMP SERVICE: HW PUMP 0.08

PUMP MFG: TACO

PUMP MODEL: 120

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/6/94

PREPARED BY: AJN/DEJ

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUM	/IBER:	0222			В	LDG NA	ME:	ADMIN G	EN PUR	P			
PER RAD (SYSTE	I TAG) NO	: RAD)-1		- . F	AD S	S LOCA	TION:	ADMIN O	FFICES		
sou	JRCE OF	HEATING	: BLR	-1	- 22 800		S	ERVES A	AREA:	1ST 2ND	FLOOR I	NORTH	
RAD	IATION I	JNIT TYPI	E: HW					% AREA	HTG:		1	7.	
RADIA	TION	PUMI	Р								ı		
PUMP T	AG: 1			PUM	IP HP:	0.08		PUMP	MFG:	BELL AN	O GOSSE	ETT	
	_						ı	PUMP M	ODEL:	UQN4851	7D1088N	Λ	
SCHED	ULE												
DA	YS SCH	EDULE NO	D:	56	<u>.</u>	MONT	нѕ ѕс	HEDULE	NO:		1		
SCHE	DULE C	OMMENTS	3:										
		SUN:	MON:	TUE	WED	: THU	R:	FRI:	SAT:				
PRES S		0	0	C		0	0		0				
PRES S	STOP:	24	24	24			24	24	24				
REQ S	TART:	11	7	7		7	7		10				
REQ	STOP:	17	17	20) 2	0 2	20	20	19				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:		\boxtimes								\square	\boxtimes	\boxtimes	
CONTR	OLS												
TY	PE OF R	AD. CON	TROLS:	PNEUN	MATIC								
	RADIA	TION CO	NTROL:	NONE									
	00	C HT SPA	CE SP	-	0								
		C HT SPA			0			R	ESET C	ONTROL:	N		
	CONTR	OL COM	MENTS:	3-way p	neumatic	control v	alve in	MER					_

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/6/94
PREPARED BY: AJN/DEJ

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0222 BLDG N	AME: ADMIN GEN PURP
REF. UNIT NUMBER/TAG: CH-1	LOCATION (MER#): SOUTH OF BLDG
	AHU'S SERVED: AHU-1
UNIT TYPE AIR COOLED CONDEN	SING UNIT W/ CHW
NAMEPLATE	
CHILLER MFG: TSI	TOWER MFG:
CHILLER MODEL: 30A0C055	# OF TOWER FANS: 4
CHILLER SERIAL NO: 5-93-A26983	TOWER FAN V: 208
CHILLER V: 208	TOWER FAN AMPS: 0
CHILLER AMPS: 84	TOWER FAN HP: 1
CHILLER PH: 3 CHILLER CAP (TONS): 30	
COMMENTS:	:
SCHEDULE	
DAYS SCHEDULE NO: 56	MONTHS SCHEDULE NO: 2
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: PRES START: 0 0 0 0	THUR: FRI: SAT:
PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24	24 24 24
REQ START: 11 7 7 7	7 7 10
REQ STOP: 17 17 20 20	20 20 19
MONTHS JAN: FEB: MAR: APR: MAY: JU ON:	N: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	
CWS SETPOINT: 0	CNWS SETPOINT: 0
CWR SETPOINT: 0	CNWR SETPOINT: 0
PRESS LITE HI: N TEMP LIT	TE HI: N OTHER INDICATIONS:
PRESS LITE LOW: N TEMP LITE	
PRESS GAUGES: N TEMP GAU	GES: [N]
CONTROLS COMMENTS:	
CW and CNW PUMPS	
PUMP TAG: 1 PUMP HP:	3 PUMP MFG: MARATHON
PUMP SERVICE: CW PUMP (Chilled Water)	PUMP MODEL: ZVC182TTDR8026DJ

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

222

FILE:

222.XLS

						222.XLS	
AIR H	IANDLING	3 UNIT - HVAC	UPGRADE (OBSERVA'	TIONS		
AHU-1	LOCATION	N (Rm) MEZZ	ANINE		****		
SZ	MFG.:			MODEL:	2A18		
H&V - Hea	ting & Vntltng	. FC - F	an Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe	e)	
:VAV - Vari	able Air Vol.	RHT -	Reheat System				
UH - Unit I	Heater	IND -	Induction System				
N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	Х
N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
DAMPERS	S WIRED & DI	SCONNECTED FROM	ATTENUATOR			DPR-ACT = Dampe	er Actuator
			2.000	· · · · · · · · · · · · · · · · · · ·		RP-ACT = Replace	Actuator
				,		1.2.00	
N/A:	OK:	REPLACE:	SIZE:				
IOK∙ X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:			
	1						
	1		100				
		1	COMMEN	ITC:	N/Δ		
					14/7		
UK:	TREPLACE		COMMEN	115:			
			Islan	Tauri Vilve	المنز بر	IDD AGE	Inn on
						1_	RP-BD:
- 11			I				RP-BD:
11	1	1					RP-BD:
N/A: X	JOK:	REPLACE:	SIZE:	CNTLVLV		RP-ACT:	RP-BD:
						RP-ACT = Replace	Actuator
						RP-BD = Replace I	Body
		***	<u></u>				
	OK: X	REPLACE:					
N/A:	OK: X	REPLACE:	SIZE:				
				· · · · · · · · · · · · · · · · · · ·			
N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY			
N/A:	OK: X	MISSING:		ED QUANTITY			
	AHU-1 SZ H&V - Hea VAV - Vari ,UH - Unit N N/A: N/A: N/A: N/A: X	AHU-1 LOCATION SZ MFG.: H&V - Heating & Vntltng VAV - Variable Air Vol. UH - Unit Heater N/A: OK: X N/A: OK: X N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: DAMPERS WIRED & DI 1 ACTUATOR FOR O.A N/A: OK: OK: X REPLACE OK: X REPLACE OK: REPLACE OK: REPLACE N/A: X OK: N/A: OK: REPLACE	AHU-1 LOCATION (Rm) MEZZ SZ MFG.: AMERICAN BLOWI H&V - Heating & Vntltng. FC - F VAV - Variable Air Vol. RHT - UH - Unit Heater IND - N/A: OK: X REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: OAMPERS WIRED & DISCONNECTED FROM 1 ACTUATOR FOR O.A. & R.A. N/A: OK: REPLACE: OK: X REPLACE: N/A: X OK: COMMENTS: OK: REPLACE: N/A: OK: REPLACE:	AIR HANDLING UNIT - HVAC UPGRADE (AHU-1 LOCATION (Rm) MEZZANINE SZ MFG.: AMERICAN BLOWER H&V - Heating & Vntltng. FC - Fan Coil (Indicate 2) VAV - Variable Air Vol. RHT - Reheat System UH - Unit Heater IND - Induction System N/A: OK: X REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: OMMPERS WIRED & DISCONNECTED FROM ATTENUATOR 1 ACTUATOR FOR O.A. & R.A. OK: REPLACE: SIZE: OK: X REPLACE: COMMEN OK: X REPLACE: COMMEN OK: REPLACE: COMMEN OK: REPLACE: COMMEN OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE:	AIR HANDLING UNIT - HVAC UPGRADE OBSERVA AHU-1 LOCATION (Rm) MEZZANINE SZ MFG.: AMERICAN BLOWER MODEL: H&V - Heating & Vntltng. FC - Fan Coil (Indicate 2P for 2 Pipe or VAV - Variable Air Vol. RHT - Reheat System UH - Unit Heater IND - Induction System N/A: OK: X REPLACE: SIZE: DPR-ACT N/A: OK: X REPLACE: SIZE: DPR-ACT N/A: X OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT OK: X REPLACE: SIZE: DPR-ACT OK: REPLACE: SIZE: DPR-ACT OK: REPLACE: SIZE: CMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLA	AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS AHU-1 LOCATION (Rm) MEZZANINE SZ MFG: AMERICAN BLOWER MODEL: 2A18 H&V - Heating & Vntting. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe or VAV - Variable Air Vol. RHT - Reheat System of the Unit Heater IND - Induction System N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X N/A: X OK: REPLACE: SIZE: DPR-ACT OK: N/A: N/A: OK: REPLACE: SIZE: COMMENTS: N/A OK: X REPLACE: SIZE: COMMENTS: N/A OK: REPLACE: SIZE: CNTLVLV OK: X OK: REPLACE: SIZE: CNTLVLV OK: X N/A: X OK: REPLACE: SIZE: CNTLVLV O	AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS AHU-1 LOCATION (Rm) MEZZANINE SZ MFG: AMERICAN BLOWER MODEL: 2A18 H&V - Heating & Vntiting. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe) VAV - Variable Air Vol. RHT - Reheat System IVAV - Variable Air Vol. SIZE: DPR-ACT OK: RP-ACT: IVA: OK: X REPLACE: SIZE: DPR-ACT OK: X RP-ACT: IVA: OK: X REPLACE: SIZE: DPR-ACT OK: RP-ACT: IVA: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: IVA: OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: IVA: OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: IVA: OK: REPLACE: SIZE: COMMENTS: IVA: OK: REPLACE: SIZE: COMMENTS: IVA: OK: REPLACE: SIZE: CNTLVLV OK: X RP-ACT: IVA: OK: REPLACE: SIZE: CNTLVLV OK: X RP-ACT: IVA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: IVA: OK: X RE

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

222

FILE: 222 XLS

			BLDG:	222		2.XLS
	REFRIGE	RATION	EQUIPMEN	T - HVAC UPGRADE OB	SERVATIONS	
CHILLER / EQUIP. NO.		CH-1	LOCATION (F	RM) SOUTH OF BUILDING)	
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	TSI MODEL:	30AOCD55	
C-WCT = Centrifugal w/ V	Vater Side Co	ooling Tower		R-ACCU = Reciprocating w/ Air Coc	oled Condensing Unit	
R-WCT = Reciprocating v		Cooling Towe	er -	ASB-WCT = Absorption w/ Water Si	de Cooling Tower	
ACCU = Air Cooled Cond	ensing Unit			CT = Cooling Tower		
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:		<u> </u>
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE: TYPICAI	_ OF 4	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:						
COOLING TOWER	N/A: X	lok:	REPLACE:	ISIZE:		
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:		
COMMENTS:	JIWA.	JOIN. A	INLFLACE.	SIZE.		
COMMENTS.						**************************************
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTI	TY:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTI	TY:	
	N/A:	Ток: х	REPLACE:	SIZE:		
CHW PUMP MOTOR	III V/A.					
CHW PUMP MOTOR CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
		OK: X	REPLACE:	SIZE:		
CHW PUMP SEALS	N/A:					
CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A:	OK:	REPLACE:	SIZE:		
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A:	OK:	REPLACE: REPLACE:	SIZE: SIZE:		
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:		
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

222

FILE:

222.XLS

BOILER/CONVERTER NO	· · · · · · · · · · · · · · · · · · ·	BLR-1	LOCATION (RM	AC UPGRADI		
BOILER TYPE:	'. 	HW	,	RNHAM	MODEL: FD/1	0
CONVERTER TYPE:		N/A	MFG.:		MODEL:	
STM - Steam	STM/HW		t Water Conv.	HTHW/S	ΓM - High Temp HW to	Steam Convertor
HW - Hot Water			o. HW to HW Cv.		omestic Hot Water Con	
BOILER BURNER	ATMOSP		POWER: X	OK:	REP	LACE:
COMMENTS:	LOOKS G	SOOD, RUST	ON RETURN PIPES	, NEW BURNER	<u> </u>	
				- <u> </u>		
		I a				
BLR PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
BLR PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:						
			Name of the Control o			
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:	
PIPE INSULATION	N/A:	OK:	MISSING: X	ESTIMAT	ED QUANTITY:	10' @ 4"
COMMENTS:	INSULAT	ION VER OLI	ON ALL MER PIPI	NG		
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
COMMENTS:	WIRES E	XPOSED ON	MOTORS			
OL DUILD HOTOS	Herra S	Tox	Torou sor	Total		
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
CV PUMP SEALS COMMENTS:	N/A: X	OK:	REPLACE:	SIZE:		
COMMENTS						
OOMINENTS.						
OOMINENTS.						
	ΙΝ/Δ· Χ	IOK.	IMISSING:	IESTIMAT	FD QUANTITY:	
CV INSULATION CV PIPE INSUL.	N/A: X	OK:	MISSING:		ED QUANTITY:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/6/94
PREPARED BY: AJN/DEJ

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0302 BLDG NAME: FINANCE ADMIN

ELECTRIC METER: N

GAS METER: N

SUSPECT ACM: N

CONDITIONED SQFT: 16,138

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 1

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	6	6	6	6	6	. 0
REQ STOP:	0	16	16	16	16	16	0

REMARKS:

Bldg. Contact: Joyce Murrell @ Ext. 6452

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE**: 10/6/94

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

PREPARED BY: AJN/DEJ

7(11/11/11/11/11/11/11/11/11/11/11/11/11/	NO ONLY CONVEY OBSERVATIONS
BUILDING NUMBER: 0302	
AHU NUMBER: AHU-1	AHU LOCATION: mer
REFRIG SYS # SRVNG AHU: CH-1	SERVES AREA: ALL
	% OF BLDG AREA HEATED: 83
AHU UNIT TYPE VAV	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	12,000 CFM-CLG: 12,000
MIN %OA:	10 MAX %OA: 100
NAMEPLATE	
UNIT MFG: TRANE	UNIT MODEL: CCDB17F90G
SUPPLY FAN HP:	15 RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Co	il Type Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: NONE	T
REHEAT COIL: HOT WA	TER 🗵
HUMIDIFIER: NONE	
COOLING COIL: DX	
SCHEDULE	
DAY SCHEDULE NO: 1	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON:	TUE: WED: THUR: FRI: SAT:
PRES START: 0 0	0 0 0 0 0
PRES STOP: 24 24	24 24 24 24 24
REQ START: 0 6	6 6 6 6 0
REQ STOP: 0 16	16 16 16 0
MONTHS JAN: FEB: MAR: AI	DD. MAY. HIN HII AND DEP
ON:	PR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF CONTROLS: P	NEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC:	68 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: Y IMPLEMENT DEMAND LIMIT CNTRLS? Y
MAX OA DMPR CONTROL: Y	ECONOMIZER DB CONTROL: N TIME CLOCK: Y
RET AIR DMPR CONTROL: Y	ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/6/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/DEJ

BUILDING NUMBER:		AHU LOCATION: NE CORN	NER OF BLDG
REFRIG SYS # SRVNG AHL		SERVES AREA: OFFICE/ST	ORAGE 2
	% OF BLD(S AREA HEATED.	2
AHU UNIT TYPE SINGLE	ZONE	NUMBER OF Z	ONES IF MZ UNIT: 0
CFM-HTG:	450	CFM-CLG:	450
MIN %OA:	0	MAX %OA:	0.
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	0.33	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	1	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE	. 🗖	
HEATING COIL:	ELECTRIC		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	DX		
SCHEDULE			
DAY SCHEDULE NO:	1	MONTH S	CHEDULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: TH	IUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	!
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	6 6 6	6 6 0	4
REQ STOP:0	16 16 16	16 16 0	
MONTHS JAN: FEB: M	IAR: APR: MAY: JUN:	JUL: AUG: SEP: OC	CT: NOV: DEC:
ON:			_
CONTROLS			
TYPE OF CONTR	ROLS: ELECTRIC	THERMOSTAT TYP	
PRESENT TEMP WINTR	OCC: 72	HOT DECK DEG	
PRESENT TEMP WINTR UN		COLD DECK DEG MIXED AIR DEG	
DDCCENT TEMP CUM	000	OTHER SETPOINT DESCRI	
PRESENT TEMP SUM PRESENT TEMP SUM UN		OTHER SETPOINT DESCRI	
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: N IMPLEME	NT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL:			TIME CLOCK: N
RET AIR DMPR CONTROL:			ME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL:			
ATUER CONTROL OF			
OTHER CONTROLS DE	OUR:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

CONTROLS COMMENTS:

DATE: 10/6/94 PREPARED BY: AJN/DEJ

BUILDING NUMBE		
AHU NUMBE		AHU LOCATION: ATTIC STORAGE AREA
REFRIG SYS # SRVNG A	A	SERVES AREA: ATTIC STORAG/SUPPLY AREA
KEI KIO 313 # SKVIIO A		BLDG AREA HEATED: 15
AHU UNIT TYPE UNIT	HEATER	NUMBER OF ZONES IF MZ UNIT:
CFM-HTG:	2,520	CFM-CLG: 0
MIN %OA:	0	MAX %OA: 0
NAMEPLATE		
UNIT MFG		UNIT MODEL: UDH-040B
SUPPLY FAN HP		RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MFG:
COMMENTS:		RET/EXH FAN MTR MODEL:
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL:	NONE	
HEATING COIL:	HOT WATER	
REHEAT COIL:	NONE	
HUMIDIFIER:		
COOLING COIL:	NONE	U
SCHEDULE		
DAY SCHEDULE NO: SCHEDULE COMMENTS:	1	MONTH SCHEDULE NO: 1
SUN:	MON: TUE: WED:	THUR: FRI: SAT:
PRES START: 0	0 0 0	0 0 0
PRES STOP: 24	24 24 24	
REQ START: 0	6 6 6	6 0
		6 0
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	6 6 6 16 16 16 MAR: APR: MAY: J	6 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	6 6 6 16 16 16 MAR: APR: MAY: J	6 6 16 16
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	6 6 6 16 16 16 MAR: APR: MAY: J	6 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	6 6 6 16 16 16 MAR: APR: MAY: J ⊠ □ □	6 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: CONTROLS	6 6 6 16 16 16 MAR: APR: MAY: J □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	6 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CON	6 6 6 6 16 16 16 MAR: APR: MAY: J □ □ □ □ TROLS: ELECTRIC R OCC: 7	6 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CON PRESENT TEMP WINT	6 6 6 16 16 16 MAR: APR: MAY: J □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	16 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC: □ □ □ □ □ ⊠ ⊠ □ THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	6 6 6 6 16 16 16 MAR: APR: MAY: J □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	6 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	6 6 6 16 16 16 16 MAR: APR: MAY: J □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	16
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	6 6 6 6 16 16 16 MAR: APR: MAY: J	16
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MAR: APR: MAY: J TROLS: ELECTRIC R OCC: 7 JNOCC: M OCC: JNOCC: L: N MIXED AIR D L: N ECONOMIZEI L: N ECONOMIZEI L: N ECONOMIZEI	16
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MAR: APR: MAY: J TROLS: ELECTRIC R OCC: 7 JNOCC: M OCC: JNOCC: L: N MIXED AIR D L: N ECONOMIZEI L: N ECONOMIZEI L: N ECONOMIZEI	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: OTH

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/6/94

PREPARED BY: AJN/DEJ

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER: '0302	BOILER RM LOCATION: MER
BOILER UNIT	
	VERTER SERVES AREA OR SERVICE: ALL
SOURCE OF BLDG HEAT	
■ BOILER	CONVERTER
BOILER TAG: BLR-1	CONVERTER TAG:
BOILER TYPE: HW (UP TO 250 DEG)	CONVERTER TYPE:
FUEL TYPE: NAT. GAS	CONV HT SOURCE:
CENTRAL PLANT DIRECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION:
BOILER MFG: AJAX	BLR CAP OUTPUT (BTUH): 600,000
UNIT MODEL: V554744	BLR CAP INPUT (BTUH): 750,000
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 1 SCHEDULE COMMENTS:	MONTH SECHDULE NO: 1
SUN: MON: TUE: PRES START: 0 0 0 PRES STOP: 24 24 24 REQ START: 0 6 6 REQ STOP: 0 16 16	WED: THUR: FRI: SAT: 0 0 0 0 24 24 24 24 6 6 6 0 16 16 16 0
MONTHS JAN: FEB: MAR: APR: MONTHS ON:	MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF BLR CONTROLS:	RESET CONTROLS: Y
OPERATING SETPOINT:	150 DEG F or PSIG
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	
HW PUMP	
PUMP TAG: 1 PUMP	PHP: 1.5 PUMP MFG: B & G
PUMP SERVICE: HW PUMP (STAND BY)	PUMP MODEL: M98558
HW PUMP	
PUMP TAG: 2 PUMP	PHP: 1.5 PUMP MFG: B & G
PUMP SERVICE: HW PUMP (STANDBY)	PUMP MODEL: M98558

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/6/94

PREPARED BY: AJN/DEJ

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0302	BLDG NAME:	FINANCE ADMIN	
REF. UNIT NUMBER/TAG: ACCU-1	:	LOCATION (MER#):	EXTERIOR OF BLDG
		AHU'S SERVED:	AHU-2
UNIT TYPE AIR	COOLED CONDENSING	UNIT, DX	
NAMEPLATE			
CHILLER MFG: LIEBERT		TOWER MFG:	
CHILLER MODEL: 3024968		# OF TOWER FANS:	1
CHILLER SERIAL NO:		TOWER FAN V:	0
CHILLER V:	0	TOWER FAN AMPS:	0
CHILLER AMPS:	0	TOWER FAN HP:	0.25
CHILLER PH:	0		
CHILLER CAP (TONS):	3		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	1	MONTHS SCHEDULE NO:	2
SUN: MON: PRES START: 0 0 0	24 24 2 6 6	R: FRI: SAT: 0 0 0 0 0 4 24 24 6 6 0 6 16 0	
MONTHS JAN: FEB: MAR:	APR: MAY: JUN:	JUL: AUG: SEP: OC	T: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTROLS: ELEC	CTRIC		
CWS SETPOINT:	0	CNWS SETPOINT:	0
CWR SETPOINT:	0	CNWS SETPOINT:	0
		·	
PRESS LITE HI: N PRESS LITE LOW: N PRESS GAUGES: N	TEMP LITE HI: TEMP LITE LOW: TEMP GAUGES:	N OTHER INDICATION	ORS:
CONTROLS COMMENTS:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/6/94

PREPARED BY: AJN/DEJ

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

TALL TRIODITY TITLE.	EQUITIBLE CONTRACTOR	
BLDG NUMBER: 0302	BLDG NAME: FINANCE ADMIN	
REF. UNIT NUMBER/TAG: CH-1	LOCATION (M AHU'S SEF	
LINIT TYPE AIR COOL	ED CONDENSING UNIT, DX	(VLD. A110-1
OM THE MICOSE		
NAMEPLATE		
CHILLER MFG: TRANE	TOWER MFG:	TRANE
CHILLER MODEL: RAUBC265BE00B	# OF TOWER FANS:	3
CHILLER SERIAL NO: J87C80764	TOWER FAN V:	200
CHILLER V:	200 TOWER FAN AMPS:	4.1
CHILLER AMPS:	91.5 TOWER FAN HP:	1
CHILLER PH:	3	
CHILLER CAP (TONS):	25	
COMMENTS:		
SCHEDULE		
DAYS SCHEDULE NO: 1 SCHEDULE COMMENTS:	MONTHS SCHEDU	LE NO: 2
SUN: MON: TUE	<u> </u>	:
PRES STOP: 24 24 24 24		
	$\frac{6}{6} \frac{6}{10} \frac{6}{10} \frac{0}{10}$	
REQ STOP: 0 16 10	6 16 16 0	
MONTHS JAN: FEB: MAR: APR:	MAY: JUN: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONTROLS: ELECTRIC	1	
CWS SETPOINT:	0 CNWS SETPOINT	: 0
CWR SETPOINT:	0 CNWR SETPOINT	: 0
PRESS LITE HI: N	TEMP LITE HI: N OTHER IN	DICATIORS:
PRESS LITE LOW: N	TEMP LITE LOW: N	
PRESS GAUGES: N	TEMP GAUGES: N	
CONTROLS COMMENTS:		<u> </u>

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: Nov-94 AJN

CHECKED BY:

AJN

BLDG:

302

FILE: 302.XLS

	ΔIP	HANDLIN	IG UNIT - HVAC	UPGRADE	OBSER\/A	TIONS	302.XLS	,
AHU NO.:	AHU-1	LOCATIO		UPGRADE	OBSERVA	HONS		
AHU TYPE:	Alio-i	MFG.:	TRANE		MODEL:	CLIMAT	E CHANGER	
SZ - Single Zone	H8.V . Ha	ating & Vntltng		an Coil (Indicate				
MZ - Mulitzone		iable Air Vol.	•	Reheat System	zr ioi z ripe oi	401461	Je)	
DD - Dual Duct	UH - Unit		and the second s	nduction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	<u>ОК:</u>	RP- ACT:	
COMMENTS:			1,12,101.	Joine	511(7.01		DPR-ACT = Damp	or Astrodor
OCHANIZATIO.							RP-ACT = Replace	
							IN -ACT = Neplace	, votuato:
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK:	REPLACE	FAN BEARINGS: *	COMMEN	NTS:	FAN BEARII	NG IS NOISY (PULLEY	SIDE)
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMEN	NTS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	COMMENTS: N/A			
COMMENTS:								

- 46.76***********************************								
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	Actuator
							RP-BD = Replace	Body

AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
PIPE INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY:			
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN

CHECKED BY:

AJN

	ONIONO		BLDG:	302		FILE:	302.XLS
	REFRIGE	RATION I	EQUIPMEI	NT - HVAC U	PGRADE OBS	SERVATIO	NS
CHILLER / EQUIP. NO.		CH-1	LOCATION	<u> </u>	TSIDE		
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	TRANE	MODEL:	RAUBC25	
C-WCT = Centrifugal w/ \					rocating w/ Air Coole		
R-WCT = Reciprocating v		e Cooling Tow	er		orption w/ Water Side	e Cooling Tow	er
ACCU = Air Cooled Cond	lensing Unit			CT = Cooling To	wer		
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZ	E:		
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZ			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZ			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZ			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZ	E:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZ	E:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZ	E:		
COMMENTS:	140						
COOLING TOWER	TINI/A.	10%	REPLACE:	[SIZ	·C.		
COOLING TOWER	N/A:	OK:					
AIR COOLED COND.	N/A:	OK: X	REPLACE:	Siz	E:		
COMMENTS:	DIRTY FIN	IS ON CONDE	ENSER	In the second se	× 8 × 10 × 10 × 10 × 10		
CHILLER INSUL.	N/A: X	IOK:	MISSING:	IES	TIMATED QUANTIT	Y:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:		TIMATED QUANTIT		
COMMENTS:		1-7"					
GOMMENTO.		N.A.W.A.F.	 ,				· · · · · · · · · · · · · · · · · · ·
CHW PUMP MOTOR	N/A: X	IOK:	REPLACE:	ISIZ	E:		
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZ		****	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	ISIZ		·	
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZ			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZ			
	N/A:	OK:	REPLACE:	Siz			
CHW PHMP SEALS		O . v.	1121 2 1021				
CHW PUMP SEALS		UK.	IREPLACE:	1817	′⊑∙		
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZ SIZ			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY: 302.XLS

	REFRIGE	RATION	EQUIPMEN	AVH - TI	C UPGR	ADE OBS	SERVATIONS	
CHILLER / EQUIP. NO.		ACCU-1	LOCATION	(RM)	OUTSIDE			
REFG. EQUIP. TYPE:			MFG.:	LIEBERT C	ORP.	MODEL:	302-1968	
C-WCT = Centrifugal w/	Water Side C	Cooling Tower		R-ACCU = I	Reciprocating	g w/ Air Coole	d Condensing Unit	***************************************
R-WCT = Reciprocating		e Cooling Tow	er			w/ Water Side	e Cooling Tower	
ACCU = Air Cooled Cond	densing Unit			CT = Coolin	g Tower			
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:			IS INACCESSI	BLE. IT LOC	KS GOOD.	AREA SERV	ED IS	
	APPROX.							
COOLING TOWER	N/A: X	OK:	REPLACE:		SIZE:			
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:			
COMMENTS:								
CHILLER INSUL.	N/A:	OK: X	MISSING:		ESTIMATE	ED QUANTITY	Y:	
CHW PIPE INSUL.	N/A: X	OK:	MISSING:		ESTIMATE	D QUANTITY	Y:	
COMMENTS:								
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			federal
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			2
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:	· · · · · · · · · · · · · · · · · · ·		
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	ОК:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:								

				~~~~~		,		
							****	
								-
		****						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

302.XLS

AJN AJN

CHECKED BY: 302 FILE: 302

	BOILE			UPGRADE OBSERVATIONS
BOILER/CONVERTER NO.		BLR-1	LOCATION (RM)	MER
BOILER TYPE:		HW	MFG.: AJAX	MODEL: WG-750-D
CONVERTER TYPE:			MFG.:	MODEL:
STM - Steam	1		t Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water			p. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSP		POWER:	OK: REPLACE:
COMMENTS:			RONT PLATE	
		C METER		- MARKET - A - A - A - A - A - A - A - A - A -
	NO GAS I	METER		
BLR PUMP MOTOR	N/A: X	lok:	REPLACE:	SIZE:
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:	10/A. A	1011	I'VEI D'OL.	V the test
OOIVIIVILIY I O.				
	*			
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
COMMENTS:	<u> </u>			
			W. 1848. 11 - 11 - 11 - 11 - 11 - 11 - 11 - 11	A A A A A A A A A A A A A A A A A A A
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:				
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
CV INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
	NI/A. V	OK:	MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A: X	JOIN.	MIGORIAG.	LOTHISTI LD GOSTITTI TT

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/6/94 PREPARED BY: AJN

LOCATION: FT. RILEY, KS

# BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0313 BLDG NAME: CIV PERS BLDG

ELECTRIC METER: N CONDITIONED SQFT: 6,222

GAS METER: N
SUSPECT ACM: N

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 11

SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 **REQ START:** 7 7 7 0 REQ STOP: 0 16 16 16 16 16

#### **REMARKS:**

BLDG. CONTACT: KAREN WEBB @ EXT. 2535

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/6/94 PREPARED BY: AJN

EMC NO: 1406-001

# AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER		AHU LOCATION: BASEMENT
AHU NUMBER	R: AHU-1	
REFRIG SYS # SRVNG A		SERVES AREA: ALL
	% OF B	BLDG AREA HEATED: 100
AHU UNIT TYPE SING	E ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	4,500	<b>CFM-CLG:</b> 4,500
MIN %OA:	20	MAX %OA: 20
NAMEPLATE		
UNIT MFG:	MODINE	UNIT MODEL: DJ3005
SUPPLY FAN HP:		RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:
COMMENTS	DUCT FURNANCE: INPUT	=300,000 BTUH; OUTPUT: 240,000 BTUH
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL	NONE	
HEATING COIL		
REHEAT COIL	NONE	
HUMIDIFIER	: NONE	
COOLING COIL	: DX	
SCHEDULE		
DAY SCHEDULE NO: SCHEDULE COMMENTS:	11	MONTH SCHEDULE NO: 3
DAY SCHEDULE NO:	MON: TUE: WED:	MONTH SCHEDULE NO: 3 THUR: FRI: SAT:
DAY SCHEDULE NO: SCHEDULE COMMENTS:		
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN:	MON: TUE: WED:	THUR: FRI: SAT:  0 0 0 24 24 24
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START:  0	MON: TUE: WED: 0 0	THUR: FRI: SAT:  0 0 0 24 24 24 7 7 0
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24	MON: TUE: WED: 0 0 0 24 24 24	THUR: FRI: SAT:  0 0 0 24 24 24
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0	MON:         TUE:         WED:           0         0         0           24         24         24           7         7         7           16         16         16	THUR: FRI: SAT:  0 0 0 24 24 24 7 7 0
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON:         TUE:         WED:           0         0         0           24         24         24           7         7         7           16         16         16    MAR: APR: MAY: J	THUR: FRI: SAT:  0 0 0 24 24 24 7 7 0 16 16 0
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON:         TUE:         WED:           0         0         0           24         24         24           7         7         7           16         16         16    MAR: APR: MAY: J	THUR: FRI: SAT:    0
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE: WED:	THUR: FRI: SAT:
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START: PRES STOP: PRES STOP: PREQ STOP: OREQ STOP: ON: ON:  CONTROLS	MON: TUE: WED:	THUR: FRI: SAT:  0 0 0 0 24 24 24 7 7 0 16 16 0   DUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF CON	MON: TUE: WED:	THUR: FRI: SAT:  0 0 0 24 24 24 7 7 7 0 16 16 0   DUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START: PRES START: PRES STOP: PREQ START: OREQ STOP: ON: TYPE OF COMPRESENT TEMP WIN	MON: TUE: WED:  0 0 0 24 24 24 7 7 7 16 16 16  MAR: APR: MAY: J  ITROLS: ELECTRIC  TR OCC: 7 UNOCC:	THUR: FRI: SAT:  0 0 0 0 24 24 24 7 7 7 0 16 16 0  DUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF COM PRESENT TEMP WINTR	MON: TUE: WED:  0 0 0 24 24 24 7 7 7 7 16 16 16  MAR: APR: MAY: J  ITROLS: ELECTRIC  TR OCC: 7 UNOCC: 7	THUR: FRI: SAT:  0 0 0 24 24 24 7 7 7 0 16 16 0   DUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF COM PRESENT TEMP WINT PRESENT TEMP SUM PRESENT TEMP SUM	MON: TUE: WED:  0 0 0 24 24 24 7 7 7 16 16 16  MAR: APR: MAY: J  ITROLS: ELECTRIC  TR OCC: 7  UNOCC: 7	THUR: FRI: SAT:  0 0 0 0 24 24 24 7 7 7 0 16 16 0   DUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF COM PRESENT TEMP WINT PRESENT TEMP WINT PRESENT TEMP SUM MIN OA DMPR CONTRO	MON: TUE: WED:  0 0 0 24 24 24 7 7 7 16 16 16  MAR: APR: MAY: J  ITROLS: ELECTRIC  TR OCC: 7 UNOCC: 7 UNOCC: 7 UNOCC: 7 UNOCC: 7 UNOCC: 7 UNOCC: 7	THUR: FRI: SAT:    0
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE: WED:	THUR: FRI: SAT:    0
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF COM PRESENT TEMP WINT PRESENT TEMP WINT PRESENT TEMP SUM MIN OA DMPR CONTRO	MON: TUE: WED:	THUR: FRI: SAT:

CONTROLS COMMENTS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/6/94

PREPARED BY: AJN

# REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 031	3	BLDG NAME: CIV PERS BLDG	
REF. UNIT NUMBER/TAG	G: CH-1	LOCATION (MER#):	S. EXT. OF BLDG
		AHU'S SERVED:	
UNI	IT TYPE AIR COOLED	CONDENSING UNIT, DX	
NAMEPLATE			<del></del>
	DOVANT	TOWER MFG:	
CHILLER MFG: CHILLER MODEL:		# OF TOWER FANS:	2
CHILLER MODEL:		TOWER FAN V:	230
CHILLER SERIAL NO:			3.6
CHILLER V.			0.5
CHILLER AMPS:		3	0.5
CHILLER CAP (TONS):			
CHILLER CAP (10NS).	10.		
COMMENTS:	'		
SCHEDULE			
DAYS SCHEDUL	E NO: 11	MONTHS SCHEDULE NO:	2
SCHEDULE COMME			
SUI		WED: THUR: FRI: SAT:	:
PRES START:	0 0 0	$\frac{0}{24}  \frac{0}{24}  \frac{0}{24}  \frac{0}{24}$	
	24 24 24 0 7 7		*
REQ START:	$\begin{array}{c c} 0 & 7 & 7 \\ \hline 0 & 16 & 16 \end{array}$	$\frac{7}{16} = \frac{7}{16} = \frac{7}{16} = 0$	
REQ STOP:	0 10 10	10 10 10	
MONTHS JAN: FEE	B: MAR: APR: M	AY: JUN: JUL: AUG: SEP: OC	T: NOV: DEC:
ON:			пп
<u> </u>			
CONTROLS			
CONTROLS			
TYPE OF CONT	TROLS: ELECTRIC		
CWS SET		0 CNWS SETPOINT:	0
CWR SET	TPOINT:	0 CNWR SETPOINT:	U.
PRESS I	LITE HI: N	TEMP LITE HI: N OTHER INDICATI	ORS:
PRESS LIT	ELOW: N TE	MP LITE LOW: N	
PRESS GA	AUGES: N T	EMP GAUGES: N	
AAUTDALA A	OMMENTS.		
CONTROLS C	OMMEN 19:		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

313

FILE:

				<u> </u>				
	AIR	HANDLIN	G UNIT - H	VAC UPGRADE C	DBSERVA"	TIONS		
AHU NO.:	AHU-1	LOCATIO	N (Rm)	BASEMENT			*************	
AHU TYPE: RES. TYPE F		MFG.:	MODINE		MODEL:	DJ300SF		
SZ - Single Zone	H&V - Hea	ating & Vntltng	].	FC - Fan Coil (Indicate 2	P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		RHT - Reheat System				
DD - Dual Duct	UH - Unit	Heater		IND - Induction System			0 BTU/HR INPU	T .
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	20% OUT	SIDE AIR WI	TH NO CONTRO	)L			DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	IOK: X	REPLACE:	SIZE:				·
	IN/A:	JUN: X	KEPLACE:	loise:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARING	S:  COMMENT	ΓS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMENT				
INLET VANES	N/A: X	OK:	COMMENTS					
RETURN AIR FAN	OK:		FAN BEARING		rs.	N/A	Wiles	
RETURN FAN MOTOR	OK:	REPLACE			COMMENTS:			
COMMENTS:		INCI DAGE		COMMEN	· · · · · · · · · · · · · · · · · · ·			
COMMENTO.								
COOLING COIL	N/A:	IOK: X	REPLACE:	SIZE:	CNTLVLV	Tok:	IRP- ACT:	IRP-BD:
	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL				í				
HEATING COIL PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X FURNACE	OK: OK: OK: E RUNNING	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X FURNACE	OK: OK: ERUNNING OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X FURNACE	OK: OK: OK: E RUNNING	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X FURNACE	OK: OK: ERUNNING OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X FURNACE	OK: OK: ERUNNING OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X FURNACE	OK: OK: ERUNNING OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X FURNACE	OK: OK: ERUNNING OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	ОК: ОК: ОК:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

	DEEDIAG	DATION	BLDG:	313	PGRADE OBSI	FILE:	313.XLS	
	REFRIGE					ERVATION	<u> </u>	
CHILLER / EQUIP. NO.		CH-1	LOCATION	`	JTSIDE BLDG.	4200C07EE		
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	BRYANT	MODEL:	4382G9755	I!4	
C-WCT = Centrifugal w/ \					procating w/ Air Coole	_		
R-WCT = Reciprocating v		Cooling Tower			sorption w/ Water Side	Cooling Tower		
ACCU = Air Cooled Conc			7	CT = Cooling To				
COMP. MOTOR	N/A:	OK: X	REPLACE:	1.	ZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:	i	ZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		ZE:		<u></u>	
COMP. MOTOR	N/A:	OK:	REPLACE:		ZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		ZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		ZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SI	ZE:			
COMMENTS:								
2001W0 TOWER	IIN I A	Toy.	REPLACE:	lei	ZE:			
COOLING TOWER	N/A:	OK:	REPLACE:		ZE:			
AIR COOLED COND.	N/A:	OK:	REPLACE:	X  SI	ZE:			
COMMENTS:	***							
0. W. J. ED. W.O. W.	161/A	TOY	IMISSING:	Tr.	STIMATED QUANTITY	· · · · · · · · · · · · · · · · · · ·	·	
CHILLER INSUL.	N/A:	OK:			STIMATED QUANTITY			
CHW PIPE INSUL.	N/A:	OK:	MISSING:	E	STIMATED QUANTITY			
COMMENTS:	FINS ARE	SEVERELY D	AMAGED					
01114 BUILD 11070B	INI/A . V	TOK:	IREPLACE:	Ic	ZE:			
CHW PUMP MOTOR	N/A: X N/A: X	OK:	REPLACE:		ZE:			
CHW PUMP SEALS								
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	I .	ZE: ZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:					
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		ZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:		ZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		ZE: ZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:		/⊢·			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

## **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 0500 BLDG NAME: POST HQ BLDG

GAS METER: N
SUSPECT ACM: N

CONDITIONED SQFT: 65,45

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 2

MON: TUE: WED: THUR: FRI: SUN: PRES START: 0 !___ 0 0 0 0 24 7 PRES STOP: 24 24 24 24 24 24 7 7 7 0 REQ START: 0 17 17 0 17 17 17 REQ STOP:

## **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**DATE**: 10/18/94 PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER		AHU LOCATION: BSMT SOUTH	
REFRIG SYS # SRVNG AF		SERVES AREA: BSMT SOUTH AREA HEATED:	16
AHU UNIT TYPE HEAT	PUMP	NUMBER OF ZONES IF MZ (	JNIT: 0
CFM-HTG:	6,960	<b>CFM-CLG</b> : 6,960	
MIN %OA:	0	MAX %OA: 0	
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	1.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE	— <b>П</b>	
HEATING COIL:	NONE		
REHEAT COIL:	NONE	<del>-</del>	
HUMIDIFIER:	NONE	≓ <b>Π</b>	
COOLING COIL:			
SCHEDULE			
DAY SCHEDULE NO: SCHEDULE COMMENTS:	2	MONTH SCHEDULE NO	): 3
PRES START: 0 PRES STOP: 24	MON: TUE: WED: THU  0 0 0  24 24 24	0 0	
REQ START: 0		$\frac{24}{7} = \frac{24}{7} = \frac{24}{0}$	
REQ STOP: 0	$\frac{7}{17} = \frac{7}{17} = \frac{7}{17}$	$\frac{7}{17} = \frac{7}{17} = \frac{0}{0}$	i
NEQ 0101	11 11 11	17 . 0	
ON:	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV:	DEC:
ONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE S	SETPOINT
PRESENT TEMP WINTE	occ.	HOT DECK DEG F:	0
PRESENT TEMP WINTR U		COLD DECK DEG F: MIXED AIR DEG F:	0
PRESENT TEMP SUM PRESENT TEMP SUM U		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	=		IMIT CNTRLS? N
MAX OA DMPR CONTROL RET AIR DMPR CONTROL EXH AIR DMPR CONTROL	.: N ECONOMIZER WB C	<del></del>	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

**DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER		AHU LOCATION: BSMT NOR	нт
REFRIG SYS # SRVNG AF	All:	SERVES AREA: BSMNT NOR	TH
KEI KIO OTO # OKTIO A		DG AREA HEATED:	17
AHU UNIT TYPE HEAT	PUMP	NUMBER OF ZO	NES IF MZ UNIT: 0
CFM-HTG:	8,300	CFM-CLG:	8,300
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	1.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:	:		<u>-</u>
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
REHEAT COIL:	NONE		
HUMIDIFIER:		<u></u>	
COOLING COIL:	DX	. 🗵	
SCHEDULE			
DAY SCHEDULE NO:	2	MONTH SCH	HEDULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	$\frac{7}{47} = \frac{7}{47} = \frac{7}{47}$	$\frac{7}{47} = \frac{7}{47} = \frac{0}{2}$	1
REQ STOP:0	17 17 17	17 17 0	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN	N: JUL: AUG: SEP: OCT	: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT TYPE:	
PRESENT TEMP WINTE	R OCC: 0	HOT DECK DEG F:	
PRESENT TEMP WINTR U	NOCC: 0	COLD DECK DEG F: MIXED AIR DEG F:	
PRESENT TEMP SUM	A OCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM U	NOCC: 0	OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	.: N MIXED AIR DMF	PRICONTROL: N IMPLEMENT	DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL	<del></del>	DB CONTROL: N	TIME CLOCK:
RET AIR DMPR CONTROL	.: N ECONOMIZER V	VB CONTROL: N TIM	E CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL	.: N		
OTHER CONTROLS D	ESCR:		
CONTROLS COMM	<del></del>		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

EMC NO: 1406-001

BU	ILDING NUMBER						
	AHU NUMBER	R: <u>HP-3</u>		AHU LOCATION	I: 1ST FLR SC	DUTH	
REFRIG S	SYS # SRVNG A	HU:		SERVES AREA:	1ST FLR SOU	TH	
			% OF BLI	OG AREA HEATED:			15
AHU UN	IT TYPE HEAT	PUMP		NU	IMBER OF ZON	ES IF MZ UNIT	:0
	CFM-HTG:		8,440	CFM-CLG:		8,440	<del></del> -
	MIN %OA:		0	MAX %OA:		0	
NAMEPI	_ATE						
	UNIT MFG:			UN	IT MODEL:		
SI	UPPLY FAN HP:		3	RET/EX	H FAN HP:	<del>yayayayayayayayayayayayayayayayayayaya</del>	0
SUPPLY	FAN MTR MFG:			RET/EXH FAN	MTR MFG:		
SUPPLY FA	N MTR MODEL:			RET/EXH FAN MT	R MODEL:	AND DESCRIPTION OF THE PARTY OF	MFAL.
	COMMENTS:						
COILS							
	Coil		Coil Type	Modulating	Valve?		
F	PREHEAT COIL:	NONE		— П			
	HEATING COIL:	-		— <u> </u>			
	REHEAT COIL:			—			
	HUMIDIFIER:			— <b>न</b>			
(	COOLING COIL:			🛮			
SCHEDU							
DAY SO	CHEDULE NO:	2			MONTH SCH	EDULE NO:	3
	COMMENTS:	<u> </u>			WONTH 30H	EDULE NO.	
	SUN:	MON:	TUE: WED: 1	THUR: FRI:	SAT:		<del></del>
PRES STA		0	0 0	0 0	0		
PRES ST		24	24 24	24 24	<del></del> 24		
REQ STA		7	$\frac{24}{7} = \frac{24}{7} =$	7 7	0		
REQ ST		17	$\frac{7}{17} = \frac{7}{17} = \frac{7}{17}$	17 17	0		į.
				17 17.			:
MONTHS .	JAN: FEB:	MAR:	APR: MAY: JUN	: JUL: AUG:	SEP: OCT:	NOV: DE	C:
	$\boxtimes$	$\boxtimes$		$\boxtimes$	$\boxtimes$		İ
CONTRO	DLS						
	TYPE OF CONT	ROLS:	ELECTRIC		OSTAT TYPE:	SINGLE SETP	
PRESE	NT TEMP WINTE	R OCC:	0		DECK DEG F:		0
PRESENT	TEMP WINTR U	NOCC:	0		DECK DEG F:		0
DDE	SENT TEMP SU	N OCC			ED AIR DEG F:		0
	SENTTEMP SUM U		0	OTHER SETPO OTHER SETI	POINT DESCRIP:		0
MIN OA I	DMPR CONTROL	: N	MIXED AIR DMP	R CONTROL: N	IMPLEMENT	DEMAND LIMIT	CNTRLS? [N
	DMPR CONTROL		ECONOMIZER D				E CLOCK: N
	DMPR CONTROL	=	ECONOMIZER W	<del></del>	TIRAC	CLOCK OPER	<del></del>
	DMPR CONTROL		LCONOMIZER VV	D CONTROL: [N]	1 11V/E	OLOGN OPEK	ATIONAL! IN
OTHE	R CONTROLS D	ESCR:					
	ONTROLS COMM						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER: 0500 AHU NUMBER: HP-4		N: 1ST FLR NORTH
REFRIG SYS # SRVNG AHU:	SERVES AREA: % OF BLDG AREA HEATED:	1ST FLR NORTH
AHU UNIT TYPE HEAT PUMP	NU	JMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	13,760 <b>CFM-CLG</b> :	13,760
MIN %OA:	0 MAX %OA:	0
NAMEPLATE		
UNIT MFG:	UN	IT MODEL:
SUPPLY FAN HP:	5 RET/EX	H FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN	
SUPPLY FAN MTR MODEL:	RET/EXH FAN MT	R MODEL:
COMMENTS:		
COILS		
Coil	Coil Type Modulating	Valve?
PREHEAT COIL: NONE		
HEATING COIL: NONE		
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: DX		
SCHEDULE		
DAY SCHEDULE NO: 2		MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI:	SAT:
PRES START: 0 0	0 0 0	0
PRES STOP: 24 24	24 24 24 24	24
REQ START: 0 7	$\frac{7}{17}$ $\frac{7}{17}$ $\frac{7}{17}$ $\frac{7}{17}$ $\frac{7}{17}$	0
REQ STOP: 0 17	17 17 17 17	:
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONTROLS:		MOSTAT TYPE: SINGLE SETPOINT
TYPE OF CONTROLS: PRESENT TEMP WINTR OCC:	НОТ	DECK DEG F: 0
	O COLE	DECK DEG F: 0 DECK DEG F: 0
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC:	0 COLE	T DECK DEG F:         0           D DECK DEG F:         0           ED AIR DEG F:         0
PRESENT TEMP WINTR OCC:	0 COLE 0 OTHER SETPO	DECK DEG F: 0 DECK DEG F: 0
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC:	0 COLE 0 OTHER SETPO 0 OTHER SET	DECK DEG F:
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL:	0 OTHER SETPO OTHER SETPO OTHER SET MIXED AIR DMPR CONTROL: N	DECK DEG F: 0   0   0   0   0   0   0   0   0   0
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM UNOCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: N MAX OA DMPR CONTROL: N	0 OTHER SETPONTION OF THE SETPONT OF	T DECK DEG F: 0 D DECK DEG F: 0 D DECK DEG F: 0 D DECK DEG F: 0 DINT DESCRIP: 0 DINT DESCRIP: 0 IMPLEMENT DEMAND LIMIT CNTRLS? N
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM UNOCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: N MAX OA DMPR CONTROL: N	0 OTHER SET 0 OTHER SET 0 OTHER SET 0 OTHER SET	T DECK DEG F: 0
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM UNOCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: MAX OA DMPR CONTROL: N RET AIR DMPR CONTROL: N	0 OTHER SETPONTION OF THE SETPONT OF	T DECK DEG F: 0

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/18/94

LOCATION: FT. RILEY, KS PREPARED BY: AJN/CWW

BUILDING NUMBER: 0500	NAME OF THE OWNER OWNER OF THE OWNER O	
AHU NUMBER: HP-5	AHU LOCATION	I: 2ND FLR
REFRIG SYS # SRVNG AHU:	SERVES AREA:	2ND FLR
	% OF BLDG AREA HEATED:	20
AHU UNIT TYPE HEAT PUMP	NU	JMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	15,480 <b>CFM-CLG</b> :	15,480
MIN %OA:	0 MAX %OA:	. 0
NAMEPLATE		
UNIT MFG:	UNI	IT MODEL:
SUPPLY FAN HP:	5 RET/EXI	H FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN	MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MT	R MODEL:
COMMENTS:		
COILS		
Coil	Coil Type Modulating	Valve?
PREHEAT COIL: NONE		
HEATING COIL: NONE		
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: DX		
SCHEDULE		
DAY SCHEDULE NO: 2		MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI:	SAT:
PRES START: 0 0	0 0 0 0	0
PRES STOP: 24 24	24 24 24 24	
REQ START: 0 7	$\frac{7}{12}$ $\frac{7}{12}$ $\frac{7}{12}$ $\frac{7}{12}$ $\frac{7}{12}$	0
REQ STOP: 0 17	<u>17</u> <u>17</u> <u>17</u> <u>17</u>	0
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON: 🛛 🖾 🖾		
CONTROLS		
TYPE OF CONTROLS:	ELECTRIC THERM	OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	COLD	DECK DEG F: 0 ED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPO	
PRESENT TEMP SUM UNOCC:		POINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL: N		<u>-</u> . <u>-</u>
OTHER CONTROLS DESCR:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**DATE:** 10/18/94 PREPARED BY: AJN/CWW

711111711412		
BUILDING NUMBER: 0500	)	
AHU NUMBER: HP-	AHU LOCATION	I: 3RD FLR
REFRIG SYS # SRVNG AHU:	SERVES AREA:	3RD FLR
-	% OF BLDG AREA HEATED:	14
AHU UNIT TYPE HEAT PUMP	NL	IMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	9,750 <b>CFM-CLG</b> :	9,750
MIN %OA:	0 MAX %OA:	0
NAMEPLATE		
UNIT MFG:	UNI	T MODEL:
SUPPLY FAN HP:		H FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN	MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MT	R MODEL:
COMMENTS:		
COILS		
Coil	Coil Type Modulating	Valve?
PREHEAT COIL: NONE		
HEATING COIL: NONE	. 🗖	
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: DX		
SCHEDULE		
DAY SCHEDULE NO: 2		MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		·
SUN: MON:	TUE: WED: THUR: FRI:	SAT:
PRES START: 0 0	0 0 0	0
PRES STOP: 24 24	24 24 24 24	24
REQ START: 0 7 REQ STOP: 0 17	7 7 7 7 7	0
REGISTOR. 0 17		
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON: □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□		
CONTROLS		
TYPE OF CONTROLS:		OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	: <b>0</b> :	DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	. O:	DECK DEG F: 0 ED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPO	
PRESENT TEMP SUM UNOCC:		POINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N	_	
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/18/94

PREPARED BY: AJN/CWW

## **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER: 0500	BOILER RM LOCATION: MER BASEMENT
BOILER UNIT	
SOURCE OF BLDG HEAT	ONVERTER SERVES AREA OR SERVICE: ALL
● 図 BOILER	CONVERTER
BOILER TAG: BLR-1	CONVERTER TAG:
BOILER TYPE: LOW PRESS STEAM	(<15#) CONVERTER TYPE:
FUEL TYPE: NAT. GAS	CONV HT SOURCE:
OFNITRAL PLANT DIPERT	
CENTRAL PLANT DIRECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION: 0
BOILER MFG: AJAX	BLR CAP OUTPUT (BTUH): 3,400,000
UNIT MODEL: SGXFD-4250	BLR CAP INPUT (BTUH): 4,250,000
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 10	MONTH SECHDULE NO: 3
SCHEDULE COMMENTS:	MONTH SECREDULE NO. 3
SUN: MON: TU	
PRES START: 0 0	
	24 24 24 24
REQ START: 0 0	
REQ STOP: 24 24 2	24 24 24 24
MONTHS JAN: FEB: MAR: APR:	MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
	JMATIC RESET CONTROLS: Y
OPERATING SETPOINT:	10 DEG F or PSIG
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	
HW PUMP	
PUMP TAG: 1 PU	JMP HP: 40 PUMP MFG: BALDOR
PUMP SERVICE: CONDENSER WATER PL	UMP PUMP MODEL: M2539T
HW PUMP	
PUMP TAG: 2 PU	JMP HP: 40 PUMP MFG: BALDOR
PUMP SERVICE: CONDENSER WATER PL	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94
PREPARED BY: AJN/CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

NAMEPLATE	
NAMEPLATE  CHILLER MFG:	
NAMEPLATE           CHILLER MFG: CHILLER MODEL: FOF TOWER FANS: SAT: PRES START: ORDER FANDE: START: REQ STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	1PS
CHILLER MFG:       TOWER MFG:       BALTIMORE         CHILLER MODEL:       # OF TOWER FANS:       3         CHILLER SERIAL NO:       TOWER FAN V:       0         CHILLER V:       0       TOWER FAN AMPS:       0         CHILLER AMPS:       0       TOWER FAN HP:       30         CHILLER CAP (TONS):       0       0       COMMENTS:         SCHEDULE NO:       10       MONTHS SCHEDULE NO:       3         SCHEDULE COMMENTS:         PRES START:       0       0       0       0       0       0       0       0       PRES STOP:       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24	
CHILLER MODEL: # OF TOWER FANS: 3 CHILLER SERIAL NO: TOWER FAN V: 0 CHILLER V: 0 TOWER FAN AMPS: 0 CHILLER AMPS: 0 TOWER FAN HP: 30 CHILLER PH: 0 CHILLER CAP (TONS): 0  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 MONTHS SCHEDULE NO: 3 SCHEDULE COMMENTS:  PRES START: 0 0 0 0 0 0 0 0 0 SPEC START: 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 0 0 0 REQ START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
CHILLER SERIAL NO:         TOWER FAN V:         0           CHILLER V:         0         TOWER FAN AMPS:         0           CHILLER AMPS:         0         TOWER FAN HP:         30           CHILLER PH:         0         0         TOWER FAN HP:         30           CHILLER CAP (TONS):         0         0         0         0           COMMENTS:         SCHEDULE NO:         3         3         3           SCHEDULE COMMENTS:         SUN:         MON:         TUE:         WED:         THUR:         FRI:         SAT:           PRES START:         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	
CHILLER V:         0         TOWER FAN AMPS:         0           CHILLER AMPS:         0         TOWER FAN HP:         30           CHILLER PH:         0         CHILLER CAP (TONS):         0           COMMENTS:    SCHEDULE  DAYS SCHEDULE NO: SCHEDULE NO: SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: WED: THUR: FRI: SAT: PRES START: 0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	
CHILLER AMPS: 0 TOWER FAN HP: 30  CHILLER PH: 0 CHILLER CAP (TONS): 0  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 MONTHS SCHEDULE NO: 3 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	
CHILLER PH: 0 CHILLER CAP (TONS): 0  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 MONTHS SCHEDULE NO: 3 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	
CHILLER CAP (TONS): 0  COMMENTS:    SCHEDULE	
COMMENTS:   SCHEDULE NO:   10	
SCHEDULE           DAYS SCHEDULE NO:         10         MONTHS SCHEDULE NO:         3           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START:         0         0         0         0         0         0         0         PRES STOP:         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24	
DAYS SCHEDULE NO: 10       MONTHS SCHEDULE NO: 3         SCHEDULE COMMENTS:         SUN: MON: TUE: WED: THUR: FRI: SAT:         PRES START: 0 0 0 0 0 0 0 0 0 0         PRES STOP: 24 24 24 24 24 24 24 24 24         REQ START: 0 0 0 0 0 0 0 0 0 0       0 0 0 0 0 0         REQ STOP: 24 24 24 24 24 24 24 24       24 24 24 24         MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DE ON: ON: □       □         CONTROLS       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □       □	
SCHEDULE COMMENTS:   SUN: MON: TUE: WED: THUR: FRI: SAT:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START:       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <t< td=""><td>1</td></t<>	1
PRES STOP:       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24	
REQ START:       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td< td=""><td>1</td></td<>	1
REQ START:       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2 <td< td=""><td>1</td></td<>	1
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DE ON:   CONTROLS  TYPE OF CONTROLS: ELECTRIC	:
ON: N N N N N N N N N N N N N N N N N N	i
ON: N N N N N N N N N N N N N N N N N N	
CONTROLS  TYPE OF CONTROLS: ELECTRIC	EC:
CONTROLS  TYPE OF CONTROLS: ELECTRIC	3
CWS SETPOINT: 0 CNWS SETPOINT:	
	0
CWR SETPOINT: 0 CNWR SETPOINT:	0
PRESS LITE HI: N OTHER INDICATIONS:	_
PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N	
CONTROLS COMMENTS:	
CW and CNW PUMPS	
PUMP TAG: 1 PUMP HP: 5 PUMP MFG: GE	
PUMP SERVICE: COOLING TOWER PUMP MODEL: 5K182JX27A	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

PREPARED BY: AJN/CWW

**DATE**: 10/18/94

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0500	)	BLDG NAME:	POST HQ BLDG			
REF. UNIT NUMBER/TAG	): <u>CT-1</u>		LOCATION (		ALL HEAT	PLIMPS
UNIT	T TYPE OTHER		Anoosi	INVED.	ALLTILA	T OWN 3
NAMEPLATE	Value 2012 21 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					
CHILLER MFG:	:		TOWER MFG:	BALTII	MORE	
CHILLER MODEL:			# OF TOWER FANS:			3
CHILLER SERIAL NO:			TOWER FAN V:			0
CHILLER V:	0		TOWER FAN AMPS:			0
CHILLER AMPS:	0		TOWER FAN HP:			30
CHILLER PH:	. 0	)				
CHILLER CAP (TONS):	0	)				
COMMENTS:						
CHEDULE						
DAYS SCHEDULE	NO: 10		MONTHS SCHEDI	JLE NO:	3	
SCHEDULE COMME	NTS:					
SUN	I: MON: TUE:	WED: THUR	: FRI: SAT:			
PRES START:	0 0 0	0 (	0 0 0			
PRES STOP: 24	4 24 24	24 24				
REQ START:	0 0 0	0 (	0 0 0			
REQ STOP: 24	4 24 24	24 24	4 24 24			
MONTHS JAN: FEB:	: MAR: APR: MA	AY: JUN: 、	JUL: AUG: SEF	: OCT	: NOV:	DEC:
ON: ⊠ ⊠				$\boxtimes$	$\boxtimes$	
CONTROLS		Δ (Δ				<u> </u>
TYPE OF CONTR	ROLS: ELECTRIC					
CWS SETF	POINT:	0	CNWS SETPOIN	г: .		0
CWR SET	POINT:	0	CNWR SETPOIN			0
DDE66 II	ren Di					
PRESS LITE	<b>=</b>	TEMP LITE HI:	OTHER IN	DICATIO	JKS:	
PRESS LITE PRESS GA		MP LITE LOW:				
CONTROLS CO		EMP GAUGES:	[N]			
CW and CNW P	UMPS					
PUMP TAG: 1	PUMP HP:		PUMP MFG	: GE		
UMP SERVICE: COOLING		:	PUMP MODEL		2JX27A	
L						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94 CWW

PREPARED BY:

AJN

500 BLDG:

FILE:

CHECKED BY: 500.XLS

Alf	R HAND	LING UN	IIT - HV	AC UPO	RADE	OBSERV	OITA	VS
AHU NO.:	HP-1	LOCATION	l (Rm)	Throughou	ut building			
AHU TYPE:	Heat Pum	MFG.:				MODEL:		
SZ - Single Zone	H&V - He	ating & Vnt	ltng.				Pipe or 4	P for 4 Pipe)
MZ - Mulitzone	VAV - Va	riable Air V	ol.	RHT - Reh				
DD - Dual Duct	UH - Unit	Heater		IND - Indu	ction Syste	em		
O.A. DAMPER	N/A: X	OK:	REPLACE	:	SIZE:	DPR-ACT	OK:	RP- ACT:
R.A. DAMPER	N/A: X	OK:	REPLACE	:	SIZE:	DPR-ACT	OK:	RP- ACT:
E.A. DAMPER	N/A: X	OK:	REPLACE	:	SIZE:	DPR-ACT	OK:	RP- ACT:
F. & B. DAMPER	N/A: X	ок:	REPLACE	:	SIZE:	DPR-ACT	OK:	RP- ACT:
ZONE DAMPER	N/A: X	OK:	REPLACE	:	SIZE:	DPR-ACT	OK:	RP- ACT:
COMMENTS:  DPR-ACT = Damper Actuator								
								RP-ACT = Replace Actuator
FILTER SECTION	N/A:	OK: X	REPLACE	:	SIZE:			
COMMENTS:								
SUPPLY AIR FAN	ОК: Х	REPLACE	FAN BEAF	RINGS:	COMMEN	TS:		
SUPPLY FAN MOTOR	OK: X	REPLACE:			COMMEN	TS:		
INLET VANES	N/A: X	ОК:	COMMEN	ITS:				
RETURN AIR FAN	OK:	REPLACE	FAN BEAF	RINGS:	COMMEN	TS:	N/A	
RETURN FAN MOTOR	OK:	REPLACE:			COMMEN		N/A	
COMMENTS:		1						.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
COMMENTS.		<del></del>				·	al'e ev	
			***				**	
COOLING COIL	N/A:	ок: х	REPLACE	•	SIZE:	CNTLVLV	ок:	RP- ACT: RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE		SIZE:	CNTLVLV	OK:	RP- ACT: RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE		SIZE:	CNTLVLV	ок:	RP- ACT: RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE		SIZE:	CNTLVLV	ок:	RP- ACT: RP-BD:
COMMENTS:					1		JL	RP-ACT = Replace Actuator
COMMENTO:								RP-BD = Replace Body
	·		194		***************************************			
	<u></u>							
AHU PUMP MOTOR	N/A: X	OK:	REPLACE	:	SIZE:			
AHU PUMP SEALS	N/A: X	OK:	REPLACE		SIZE:			
COMMENTS:		1						
CONTINUE NO.								
PIPE INSULATION	N/A: X	ОК:	MISSING	<u> </u>	IESTIMAT	ED QUANT	ITY:	
DUCT INSULATION	N/A: X	lok:	MISSING		L	ED QUANT		
		1010	INTOONING		I = O + III / I			
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

500 BLDG: FILE: 500.XLS **REFRIGERATION EQUIPMENT - HVAC UPGRADE OBSERVATIONS** CHILLER / EQUIP. NO. ILOCATION (RM) CT-1 OUTSIDE REFG. EQUIP. TYPE: CT MFG.: MODEL: C-WCT = Centrifugal w/ Water Side Cooling Tower R-ACCU = Reciprocating w/ Air Cooled Condensing Unit R-WCT = Reciprocating w/ Water Side Cooling Tower ASB-WCT = Absorption w/ Water Side Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower COMP. MOTOR N/A: X REPLACE: OK: SIZE: COMP. MOTOR N/A: X OK: REPLACE: SIZE: COMP. MOTOR N/A: X REPLACE: SIZE: COMP. MOTOR N/A: X OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: OK: X REPLACE: SIZE: AIR COOLED COND. N/A: OK: REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X MISSING: OK: **ESTIMATED QUANTITY:** CHW PIPE INSUL. N/A: X MISSING: OK: ESTIMATED QUANTITY: COMMENTS: DX UNIT CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 11 Nov-94

CHECKED BY:

CWW AJN

BLDG:

500

FILE: 500.XLS

BOI	LER &	CONVE	RTER - HVAC U	PGRADE OBSERVATIONS
BOILER/CONVERTER I	NO.	BLR-1	LOCATION (RM)	MER BASEMENT
BOILER TYPE:	STM		MFG.:	MODEL:
CONVERTER TYPE:			MFG.:	MODEL:
STM - Steam			Hot Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water	HTHW/	∃W - High T	emp. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOS	PHERIC:	POWER: X	OK: X REPLACE:
COMMENTS:				
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				
HW PUMP MOTO		OK: X	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP MOTO		OK: X	REPLACE:	SIZE:
HW PUMP SEALS		OK: X	REPLACE:	SIZE:
HW PUMP MOTO		OK:	REPLACE:	SIZE:
HW PUMP SEALS	· ———	OK:	REPLACE:	SIZE:
HW PUMP MOTO		OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
CV PUMP SEALS	N/A: X	ок:	REPLACE:	SIZE:
COMMENTS:				
	17			
CV INSULATION	N/A: X		MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A: X	ок:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**DATE:** 10/18/94 PREPARED BY: JM

## **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 0509

**BLDG NAME: ADM GEN PURPOSE** 

ELECTRIC METER: Y

SUSPECT ACM: N

GAS METER: N

CONDITIONED SQFT: 10,108

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO:

SUN: MON: TUE: WED: THUR: FRI: 0 0 0 0 0 0 PRES START: 24 24 PRES STOP: 0 = 7 = 7 7 7 REQ START: 7 0 REQ STOP: 0 17 17 17 17 17

## **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

		<del></del>	
BUILDING NUMBER AHU NUMBER		AHU LOCATION: ZONE PER	RIMETER
REFRIG SYS # SRVNG A		SERVES AREA: ALL DG AREA HEATED:	100
AHU UNIT TYPE HEAT	PUMP	NUMBER OF ZO	NES IF MZ UNIT: 0
CFM-HTG:	8,440	CFM-CLG:	8,440
MIN %OA:		MAX %OA:	0
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	:
SUPPLY FAN HP:	1.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	The second secon
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	<u> </u>		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	DX		
SCHEDULE			
DAY SCHEDULE NO:	2	MONTH SC	HEDULE NO: 3
SCHEDULE COMMENTS:			
SUN:		THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	:
REQ START: 0	$\frac{7}{17} = \frac{7}{17} $	$\frac{7}{17} = \frac{7}{17} = \frac{0}{17}$	
REQ STOP: 0	17 17 17	<u> 17 . 17. 0,</u>	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN	N: JUL: AUG: SEP: OCT	T: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	TROLS: ELECTRIC	THERMOSTAT TYPE	: SINGLE SETPOINT
PRESENT TEMP WINT	R OCC: 0	HOT DECK DEG F	
PRESENT TEMP WINTR U		COLD DECK DEG F MIXED AIR DEG F	
PRESENT TEMP SUI	M OCC: 0	OTHER SETPOINT DESCRIP	
PRESENT TEMP SUM U		OTHER SETPOINT DEG F:	<del></del>
MIN OA DMPR CONTROL	L: N MIXED AIR DMF	PR CONTROL: N IMPLEMENT	DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL	L: N ECONOMIZER D	DB CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL	L: N ECONOMIZER W	VB CONTROL: N TIN	E CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL	===	<del></del>	<u> </u>
OTHER CONTROLS	DESCR:		
CONTROLS COMM	MENTS:		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY:

AJN

BLDG:

509

FILE:

AHU NO.:	HP-1	LOCATIO	N (Rm) BASEN	MENT					
AHU TYPE:	HEAT PUM		FHP MFG. DIVISION OF		MODEL:	HE012-1	HZN		
SZ - Single Zone		iting & Vntltng		an Coil (Indicate 2		4P for 4 Pig	oe)		
MZ - Mulitzone		able Air Vol.		Reheat System	•	,	•		
DD - Dual Duct	UH - Unit l			nduction System					
O.A. DAMPER	N/A: X	IOK:	REPLACE:	ISIZE:	DPR-ACT	OK:	RP- ACT:		
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:		
F. & B. DAMPER	N/A: X	ок:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:		
ZONE DAMPER	N/A: X	ок:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
COMMENTS:	WATER S	OURCE HEA	T PUMP. WATER SOU	RCE IS FROM B	LDG.		DPR-ACT = Dampe	r Actuator	
	500. COC	LING TOWE	RS NEXT TO BLDG. AR	E IN GOOD CON	NDITION.		RP-ACT = Replace	Actuator	
	HEAT PU	MP IS TYPICA	AL THROUGHOUT BLD	G.			****		
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:					
COMMENTS:									
*********							- "		
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:				
SUPPLY FAN MOTOR	OK: X	REPLACE	•	COMMEN	ITS:				
INLET VANES	N/A: X	IOK:	COMMENTS:						
					[COMMENTS: N/A				
		REPLACE	FAN BEARINGS:	ICOMMEN	ITS:	N/A			
RETURN AIR FAN	OK:		FAN BEARINGS:			N/A N/A			
RETURN AIR FAN RETURN FAN MOTOR		REPLACE		COMMEN		N/A N/A			
RETURN AIR FAN RETURN FAN MOTOR	OK:								
RETURN AIR FAN RETURN FAN MOTOR	OK:								
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK:	REPLACE		COMMEN	ITS:	N/A	IRP- ACT:	IRP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK: OK: N/A: X	REPLACE	REPLACE:	COMMEN	CNTLVLV	N/A OK:	RP- ACT:	RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK: N/A: X N/A: X	REPLACE OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	N/A OK: OK:	RP- ACT:	RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK:   OK:   N/A: X   N/A: X   N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK:		RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A: X	REPLACE OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK:   OK:   N/A: X   N/A: X   N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK:   OK:   N/A: X   N/A: X   N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK:   OK:   N/A: X   N/A: X   N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	OK: OK: N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/14/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN

## **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 5000 BLDG NAME: FIRE STATION

GAS METER: N
SUSPECT ACM: Y

CONDITIONED SQFT:

8,400

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

FRI: SUN: MON: TUE: WED: THUR: SAT: PRES START: 0 0 0 0 0 0 0 24 24 24 PRES STOP: 24 24 24 24 0 0 0 0 0 0 0 **REQ START:** 24 24 24 REQ STOP: 24 24 24 24

## **REMARKS:**

Two gas-fired infrared heaters in bay, reverber ray 24" x 24"

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/14/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN

BUILDING NUMBER	R: 5000		
AHU NUMBER		AHU LOCATION: MER	
REFRIG SYS # SRVNG A	HU: CH-1	SERVES AREA: COMMUN	NICATIONS/QUARTER
	% OF BI	LDG AREA HEATED:	60
AHU UNIT TYPE MULT	IZONE	NUMBER OF	ZONES IF MZ UNIT: 5
CFM-HTG:	4,155	CFM-CLG:	4,155
MIN %OA:	20	MAX %OA:	20
NAMEPLATE			
UNIT MFG:	DUNHAM BUSH	UNIT MODEL:	VMZ32D
SUPPLY FAN HP:	5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	HOT WATER		
REHEAT COIL:	NONE		
HUM!DIFIER:		<u></u>	
COOLING COIL:	DX		
SCHEDULE			
DAY SCHEDULE NO:	10	MONTH	SCHEDULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	:
REQ START: 0	0 0 0	0 0 0	:
REQ STOP: 24	24 24 24	24 24 24	!
MONTHS IAN PED	MAD 400 MAY 111		
ON:	MAR: APR: MAY: JU		OCT: NOV: DEC:
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT TY	
PRESENT TEMP WINTE	R OCC: 70	HOT DECK DE	
PRESENT TEMP WINTR U	NOCC: 0	MIXED AIR DE	
PRESENT TEMP SUM	W OCC: 70	OTHER SETPOINT DESC	
PRESENT TEMP SUM U		OTHER SETPOINT DEC	
MIN OA DMPR CONTROL	.: N MIXED AIR DM	PR CONTROL: N IMPLEM	ENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL		===	TIME CLOCK: N
RET AIR DMPR CONTROL			TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL		Johnnoe. [11]	THE SECONDI ENAMOUAL!
OTHER CONTROLS D			·
CONTROLS COMM	IENIS: +		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE**: 10/14/94

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

PREPARED BY: AJN

BUILDING NUMBER: 5000 AHU NUMBER: AHU-2 AHU LOCATION: ABOVE CEILING  REFRIG SYS # SRVNG AHU: SERVES AREA: VEHICLE MAINT. BAY  % OF BLDG AREA HEATED: 40  AHU UNIT TYPE HEATING AND VENTILATING NUMBER OF ZONES IF MZ UNIT:	
REFRIG SYS # SRVNG AHU: SERVES AREA: VEHICLE MAINT. BAY  % OF BLDG AREA HEATED: 40	
% OF BLDG AREA HEATED: 40	
AHU UNIT TYPE HEATING AND VENTILATING NUMBER OF ZONES IF MZ UNIT:	<b>—</b> ,
	0
<b>CFM-HTG</b> : 3,840 <b>CFM-CLG</b> : 0	
MIN %OA: 100 MAX %OA: 100	
NAMEPLATE	
UNIT MFG: UNIT MODEL:	
SUPPLY FAN HP: 1.5 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG: CENTURY RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	1· =
COOLING COIL: NONE   SCHEDULE  DAY SCHEDULE NO: 10 MONTH SCHEDULE NO:	1· 
COOLING COIL: NONE   SCHEDULE  DAY SCHEDULE NO: 10	<u>1</u>
COOLING COIL: NONE   SCHEDULE  DAY SCHEDULE NO: 10	
COOLING COIL: NONE   SCHEDULE  DAY SCHEDULE NO: 10	1.
COOLING COIL: NONE   SCHEDULE  DAY SCHEDULE NO: 10	1·
COOLING COIL:   NONE	1.
COOLING COIL: NONE   SCHEDULE  DAY SCHEDULE NO: 10	1.
COOLING COIL:   NONE	1.
SCHEDULE   DAY SCHEDULE NO:   10	
SCHEDULE	
SCHEDULE   DAY SCHEDULE NO:   10	
SCHEDULE   DAY SCHEDULE NO:   10	
SCHEDULE   DAY SCHEDULE NO:   10	
SCHEDULE   DAY SCHEDULE NO: 10	
SCHEDULE   DAY SCHEDULE NO: 10	RLS?
SCHEDULE   DAY SCHEDULE NO: 10	RLS?
SCHEDULE   DAY SCHEDULE NO:	RLS?

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/14/94
PREPARED BY: AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING N	UMBER:	5000					BOILER	RM LOCA	ATION:	MER		
BOILER U	NIT											
— SOURCE OF	BLDG HE	ΔT	BLR/CON	VERTER	SERV	ES ARE	EA OR SE	RVICE:	ALL			
. ● □ <u>BOI</u> I						ПС	ONVERTI	ER		-		
:	-	BLR-1					IVERTER					
BOILE	R TYPE:	HW (UP TO	250 DEG)			CON	ERTER	TYPE:				- :
FUE	L TYPE:	NAT. GAS				CON	V HT SOL	JRCE:				
CENTRA	L PLANT D	IRECT										: : : !
IAMEPLA	TE				% AI	REA HE	ATED BY	BB RAD	DIATION:			
BOILER MFG:	AJAX					BLR C	AP OUTF	UT (BTU	Н):		600,000	:
UNIT MODEL:	WG-750			<del>.</del>		BLR	CAP INP	ит (вти	H):		750,000	-
COMMENTS:								,				
CHEDUL	E											•
DAYS SCHED	ULE NO:	10						MONTH	I SECHD	ULE NO:		1
SCHEDULE COM	MENTS:											
	SUN:	MON:	TUE:	WED:	THU	JR:	FRI:	SAT:				- i
PRES START			0	0			0	0				i
PRES STOP REQ START		24	24	24		24	<u>24</u> =	24				
REQ STOP		24	24	24		24	24	24				1
MONTHS IAA	- FFB.	BIAD.	4.DD.				4110					_
MONTHS JAN ON:		MAR:			JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	:
	$\boxtimes$											
CONTROL	S											
TYPE C	F BLR CON	ITROLS:	ELECTR	IC				RESE	T CONTR	ROLS:	Υ	
	RATING SE			170 D	EG F o	r PSIG				_	_	
TYPE OF BU	IRNER CON	ITROLS:	!									
CONT	ROLS COM	IMENTS:	1									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/14/94 PREPARED BY: AJN

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 5000	BLDG NAME: FIRE STATION
REF. UNIT NUMBER/TAG: CH-1	LOCATION (MER#): OUTSIDE
	AHU'S SERVED: AHU-1
UNIT TYPE AIR COOLED O	CONDENSING UNIT
NAMEPLATE	
CHILLER MFG: TSI	TOWER MFG:
CHILLER MODEL: 502CS10	# OF TOWER FANS: 1
CHILLER SERIAL NO: 9084-2	TOWER FAN V: 230
CHILLER V: 230	TOWER FAN AMPS: 4.6
CHILLER AMPS: 42.8	TOWER FAN HP: 1
CHILLER PH: 3	
CHILLER CAP (TONS): 10	
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:	MONTHS SCHEDULE NO: 2
SUN:         MON:         TUE:           PRES START:         0         0         0           PRES STOP:         24         24         24           REQ START:         0         0         0           REQ STOP:         24         24         24	WED:         THUR:         FRI:         SAT:           0         0         0         0           24         24         24         24           0         0         0         0           24         24         24         24
MONTHS JAN: FEB: MAR: APR: MA	Y: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	
CMC SETDOINT.	0 CNWS SETPOINT: 0
CWS SETPOINT: CWR SETPOINT:	0 CNWS SETPOINT: 0 0 0 CNWR SETPOINT: 0
PRESS LITE LOW: N TEN	TEMP LITE HI: N OTHER INDICATIORS: MP LITE LOW: N MP GAUGES: N
CONTROLS COMMENTS:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

5000

FILE:

			BLDG:	5000		FILE:	5000.XLS			
	AIR H	IANDLING	UNIT - HVA	C UPGRADE (	<b>OBSERVAT</b>	IONS				
AHU NO.:	AHU-1	LOCATIO	N (Rm) N	1ER						
AHU TYPE:	MZ-5	MFG.:	DUNHAM-BUS	;H	MODEL:					
SZ - Single Zone	H&V - Hea	ating & Vntltng	. F	C - Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	e)			
MZ - Mulitzone	VAV - Var	iable Air Vol.		RHT - Reheat System						
DD - Dual Duct	UH - Unit	Heater	11.	ND - Induction System	ì					
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
ZONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:			
COMMENTS:				<u> </u>			DPR-ACT = Damp	er Actuator		
							RP-ACT = Replace			
						<del></del>				
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:			·			
COMMENTS:		1								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMME	COMMENTS:					
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN						
INLET VANES	N/A: X	OK:	COMMENTS:							
RETURN AIR FAN	OK:		FAN BEARINGS:	ICOMME	COMMENTS: N/A					
RETURN FAN MOTOR	OK:	REPLACE			COMMENTS:					
COMMENTS:		THE TOTOL		TOOMINE	*10.					
OOMMENTO.		*************								
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:		
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:		
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:		
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:		
COMMENTS:							RP-ACT = Replace			
				49.44.4			RP-BD = Replace			
								,		
11-10-71-71-11-11-11-11-11-11-11-11-11-11-11-										
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		<del></del>				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				<del></del>		
COMMENTS:										
	······································									
PIPE INSULATION	N/A:	OK: X	MISSING:	IESTIMAT	ED OLIANTITY:					
DUCT INSULATION	N/A: X	OK:	MISSING:	<u></u>	ESTIMATED QUANTITY:  [ESTIMATED QUANTITY:					
		JON.	IMIOGING.	IESTIMAT	LU QUANTITY:			W.		
COMMENTS:								<del></del>		
							-			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

5000

FILE:

			G UNIT - HVAC			IONS				
AHU NO.:	H&V-1				CEILING (SERVES BAYS)					
NHU TYPE:	H&V	MFG.:			MODEL:					
Z - Single Zone		ating & Vntltng		•	n Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe)					
MZ - Mulitzone		iable Air Vol.		•	Reheat System					
D - Dual Duct	UH - Unit I			- Induction System		Tour W	IDD 10T			
A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:			
.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
ONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	UK:				
COMMENTS:							DPR-ACT = Damper Actuator			
		. ,					RP-ACT = Replace Actuator			
		Tork V	JDEDI AGE	IO17E						
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:						
COMMENTS:										
	160 0	Toen voe	EAN DEADINGS	LCOLINE	ITO.					
SUPPLY AIR FAN	OK: X		FAN BEARINGS:		COMMENTS:					
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	COMMENTS:					
NLET VANES	N/A: X	OK:	COMMENTS:							
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:		COMMENTS: N/A					
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	ITS:					
COMMENTS:										
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-BD:			
HEATING COIL	N/A:	OK; X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-BD:			
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-BD:			
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-BD:			
COMMENTS:							RP-ACT = Replace Actuator			
							RP-BD = Replace Body			
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:						
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:						
COMMENTS:										
PIPE INSULATION	N/A:	OK: X	MISSING:		ESTIMATED QUANTITY:					
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY	:				
COMMENTS:			*							

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

5000

FILE:

			IG UNIT - HVAC U	PGRADE	ORSEKVA	HONS			
AHU NO.: IR-1&2			LOCATION (Rm)						
AHU TYPE: INFRARED HE		MFG.:	RE-VERBER-RAY		MODEL:	DR 100 NSPI-8-25V			
SZ - Single Zone		ating & Vntltn	•	,	2P for 2 Pipe or	4P for 4 Pi	pe)		
MZ - Mulitzone		iable Air Vol.		eheat System					
DD - Dual Duct	UH - Unit I			luction System					
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
COMMENTS:	TYPICAL						DPR-ACT = Damp	er Actuator	
	NATURAL	GAS FIRED	); OPERABLE				RP-ACT = Replace	e Actuator	
FILTER SECTION	N/A: X	OK:	REPLACE:	ISIZE:					
COMMENTS:		10	THE TABLE	10,22.					
SUPPLY AIR FAN	IOK:	[REPLAC	E FAN BEARINGS:	COMMEN	NTS:	N/A			
SUPPLY FAN MOTOR	OK:	REPLAC	E:	COMMEN					
NLET VANES	N/A: X	OK:	COMMENTS:						
RETURN AIR FAN	OK:		E FAN BEARINGS:	COMMENTS: N/A					
RETURN FAN MOTOR	OK:		REPLACE: COMME						
COMMENTS:									
***************************************									
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	IRP-BD:	
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
COMMENTS:		10111	THE BIOL.	10:22.	ONTEVEV				
JONNELLI 1 C.						·	RP-ACT = Replace		
							rv-bb - Replace	BOJY	
AHU PUMP MOTOR	N/A: X	ОК:	REPLACE:	SIZE:					
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:					
COMMENTS:			7774						
			V*************************************		TO THE MAN VERSION				
		IOV:	MISSING:	ESTIMATED QUANTITY:					
PIPE INSULATION	N/A: X	OK:	IMICONYO.	<b>I</b>					
PIPE INSULATION DUCT INSULATION	N/A: X N/A: X	OK:	MISSING:	<del></del>	ED QUANTITY:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

5000

FILE:

REFG. EQUIP. TYPE: R-ACCU   MFG.: TSI   MODEL: 502CS10		REFRIGE	RATION E	QUIPMEN	AVH - TI	C UPGRAI	DE OBSI	ERVATIONS	
R-ACCU = Reciprocating w/ Air Cooled Condensing Unit	CHILLER / EQUIP. NO.		CH-1	LOCATION	(RM)	OUTSIDE			
ASB-WCT = Absorption w/ Water Side Cooling Tower	REFG. EQUIP. TYPE:		R-ACCU	MFG.:		,	N.		
CT = Cooling Tower	C-WCT = Centrifugal w/	Water Side Co	oling Tower			, -		_	
SOMP. MOTOR			Cooling Tower				/ Water Side	e Cooling Tower	
N/A:	ACCU = Air Cooled Cond	densing Unit			CT = Cool				
N/A:	COMP. MOTOR	N/A:	OK: X	1					
N/A;	COMP. MOTOR	N/A:							
Diagram   Diag	COMP. MOTOR								
ST/ACCU FAN MTR	COMP. MOTOR	N/A:							
STACCU FAN MTR	CT/ACCU FAN MTR	14				į.			
COMMENTS:  COOLING TOWER  N/A: X   OK:   REPLACE:   SIZE:    AIR COOLED COND.   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:  CHILLER INSUL.   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:    CHILLER INSUL.   N/A: X   OK:   REPLACE:   SIZE:    CHILLER INSUL.	CT/ACCU FAN MTR	II							
COOLING TOWER N/A: X OK: REPLACE: SIZE:  AIR COOLED COND. N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:	CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:			
AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS   COMMENTS:									
AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS   COOLING TOWER	N/A: X	OK:	REPLACE:		SIZE:				
CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:									
CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:									
CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:	OOMINETETO.								
CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:	CHILLER INSUL.	IN/A:	OK: X	MISSING:		[ESTIMATED	QUANTITY	/;	
CHW PUMP MOTOR				IMISSING:		IESTIMATED	QUANTITY	Υ:	
CHW PUMP SEALS	CLIM DEBAD MOTOR	INI/A · V	Iov.	IDEDLACE:	-	IQI7E:			
CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:		III .							
CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:									
CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:		<b>(</b> )				1			
CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:									
CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:		11	1	1					
CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:									
				_ i					
	COMMENTS:		1011.	1.12.0.02.		10,5			
		-							
		• •		<del>- 11</del>			<u> </u>	ALL CONTRACTOR OF THE CONTRACT	
								***************************************	
		<del></del>							
				<del></del>		*****			
						· · · · · · · · · · · · · · · · · · ·			

# ${\bf E}\ {\bf M}\ {\bf C}$ ENGINEERS, INC.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY:

FILE:

12 Nov-94 CWW AJN

CHECKED BY:

5000.XLS

	BOILE	R & CON	<b>IVERTER - HVAC</b>	UPGRAD	E OBSER\	/ATIONS
BOILER/CONVERTER NO	).	BLR-1	LOCATION (RM)	MER		
BOILER TYPE:	***************************************	HW	MFG.:	AJAX	MODEL:	WG-750
CONVERTER TYPE:			MFG.:	Tim Harrison Inc. 100	MODEL:	
STM - Steam	STM/HW	- Steam to Ho	ot Water Conv.	HTHW/S	TM - High Tem	p HW to Steam Convertor
HW - Hot Water			p. HW to HW Cv.	DHW - D	omestic Hot Wa	ater Convertor
BOILER BURNER		HERIC: X	POWER:	OK:	Χ	REPLACE:
COMMENTS:	BOILER L	OOKS OLD.	CHEMICAL PILES FROM	M PAST LEAK	S ON SAFETY	RELIEF
	VALVE.					
BLR PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
BLR PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:						
			WWW			
BLR INSULATION	N/A:	OK: X	MISSING:	ICOTIMAN	CO OLIANITITY	<i>/</i> .
PIPE INSULATION	N/A:	OK: X	MISSING:	<del> </del>	TED QUANTITY	
COMMENTS:	IN/A:	Jok: X	IMISSING:	ESTIMA	ED QUANTITY	Υ:
OOMMENTO.	<del></del>			<del></del>		
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	.08 HP	
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:						
OV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
COMMENTS:						
CV INSULATION	N/A: X	JOK:	MISSING:	[ECTIMAT	ED QUANTITY	/-
CV PIPE INSUL.	N/A: X	OK:	MISSING:		ED QUANTITY	
COMMENTS:		JON.	Jiviioolivo.	[ESTIMAT	בט WOANTII I	
JOIVIIVIENTS:		7-00-00-0				

5000

BLDG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 11/09/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

SAT:

#### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7178

BLDG NAME: MOTOR POOL ADMIN

ELECTRIC METER: N

GAS METER: N

SUSPECT ACM: N

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 7

SUN: MON: TUE: WED: THUR: FRI:

PRES START: PRES STOP: REQ START: 

### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 11/09/94

LOCATION: FT. RILEY, KS PREPARED BY: AJN/CWW

BUILDING NUMBE		ΔΗΙ.	LOCATION: CEI	LING MOLINTED	
REFRIG SYS # SRVNG A	.HU:	% OF BLDG AREA	<del></del>	CES/SHOP	50
AHU UNIT TYPE GAS	FIRED UH		NUMBER	OF ZONES IF MZ	UNIT: 0
CFM-HTG:	: 6	500	CFM-CLG:	0	
MIN %OA			MAX %OA:	0	
NAMEPLATE					
UNIT MFG	DAYTON FUEL TR	RIMMER	UNIT MOD	DEL: 3E368A	
SUPPLY FAN HP	0.0	8	RET/EXH FAN	HP:	0
SUPPLY FAN MTR MFG:		RET	/EXH FAN MTR M	IFG:	
SUPPLY FAN MTR MODEL		RET/E	KH FAN MTR MOD	EL:	
COMMENTS	BTUH INPUT: 75,0	000; BTU OUTPUT: 6	0750		
COILS					
Coil	Coil Type	N	odulating Valve?		
PREHEAT COIL	NONE		٦		
HEATING COIL			าี		
REHEAT COIL			<u></u>		
HUMIDIFIER:	NONE				
COOLING COIL:	NONE				
SCHEDULE					
DAY SCHEDULE NO:	7		MOM	ITH SCHEDULE N	0: 1
SCHEDULE COMMENTS:					
SUN:	MON: TUE:	WED: THUR:	FRI: SAT:		
PRES START: 0	0 0	0 0	0 0		
PRES STOP: 24	24 24	24 24	24 24		
REQ START: 0	9 8	9 12	9 0		
REQ STOP: 0	1717	17 15	17 0		
MONTHS JAN: FEB:	MAR: APR: MA	AY: JUN: JUL:	AUG: SEP:	OCT: NOV:	DEC:
ON:					
CONTROLS					
TYPE OF CON	TROLS: ELECTRIC	;	THERMOSTAT	TYPE: SINGLE	SETPOINT
PRESENT TEMP WINT	R OCC:	0	HOT DECK	DEG F:	0
PRESENT TEMP WINTR L			COLD DECK	<del></del>	0
			MIXED AIR		0
PRESENT TEMP SU PRESENT TEMP SUM I			ER SETPOINT DE THER SETPOINT		0
MIN OA DMPR CONTRO	L: N MIXE	D AIR DMPR CONTE	OL: N IMPL	EMENT DEMAND	LIMIT CNTRLS? N
MAX OA DMPR CONTRO		OMIZER DB CONTR	==		TIME CLOCK: N
RET AIR DMPR CONTRO		OMIZER WB CONTR	<b>=</b>	TIME CLOCK	OPERATIONAL? N
EXH AIR DMPR CONTRO	==				
OTHER CONTROLS	DESCR:				
CONTROL & COM	AENTO.				<del></del>

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 11/09/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER			4.T.O.V. OF	NO MOUNTED		
AHU NUMBER	R: <u>UH-2</u>	AHU LOC	ATION: CEILI	NG MOUNTED		
REFRIG SYS # SRVNG AI	HU:	SERVES A	REA: OFFICE	S/SHOP		
	% (	OF BLDG AREA HEA	TED:		50	
AHU UNIT TYPE GAS F	FIRED UH		NUMBER O	F ZONES IF M	Z UNIT: 0	
CFM-HTG:	600	CFM-	CLG:	0		
MIN %OA:	0	MAX	%OA:	0		
NAMEPLATE						<u>.</u>
UNIT MFG:	EM		UNIT MODE	L: UH-1100-1	FSP	
SUPPLY FAN HP:	0.08	R	ET/EXH FAN HI	P: -	0	
SUPPLY FAN MTR MFG:	A. A	RET/EXH	FAN MTR MF	G:		
SUPPLY FAN MTR MODEL:		RET/EXH F	AN MTR MODE	L:		
COMMENTS:						
COILS						
Coil	Coil Type	Modu	lating Valve?			
PREHEAT COIL:	NONE					
HEATING COIL:	NONE					
REHEAT COIL:	NONE					
HUMIDIFIER:	NONE					
COOLING COIL:	NONE					
SCHEDULE						
DAY SCHEDULE NO:	7		MONT	H SCHEDULE I	NO: 1	
SCHEDULE COMMENTS:						
SUN:	MON: TUE: WE	D: THUR: FR	II: SAT:			
PRES START: 0	0 0	0 0	0 0			
PRES STOP: 24	24 24	24 24 2	24 24			
REQ START: 0	9 8	9 12	9 0			
REQ STOP: 0	17 17	17 15 1	7 0		1	
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: A	UG: SEP:	OCT: NOV:	DEC:	
ON:						
CONTROLS						
TYPE OF CONT	rrols: ELECTRIC	Т	HERMOSTAT 1 HOT DECK D		E SETPOINT 0	
PRESENT TEMP WINT	R OCC:	74	COLD DECK D		0	
PRESENT TEMP WINTR U	NOCC:	0	MIXED AIR D		0	
PRESENT TEMP SUI	M OCC:	0 OTHER S	SETPOINT DES			
PRESENT TEMP SUM U			R SETPOINT DI		0	
MIN OA DMPR CONTROL	L: N MIXED AII	R DMPR CONTROL:	N IMPLE	MENT DEMAN	D LIMIT CNTRLS	? N
MAX OA DMPR CONTROL		ZER DB CONTROL:	<b>—</b>	<del></del>	TIME CLOCK	=
RET AIR DMPR CONTROL		ZER WB CONTROL:	<del></del>	TIME CLOCK	OPERATIONAL	=
EXH AIR DMPR CONTROL	<del></del>					
OTHER CONTROLS	DESCR:					
CONTROLS COMM	JENTS:					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY:

Nov-94 AJN

CHECKED BY:

AJN

7178 BLDG: FILE: 7178.XLS AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS AHU NO.: LOCATION (Rm) ONE ROOM BUILDING - IN SPACE AHU TYPE: GAS FIRED UH MFG.: DAYTON FUEL-TRIMMER MODEL: 3E368A SZ - Single Zone H&V - Heating & Vntltng. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe) MZ - Mulitzone VAV - Variable Air Vol. RHT - Reheat System IND - Induction System DD - Dual Duct UH - Unit Heater O.A. DAMPER REPLACE: SIZE: N/A: X OK: DPR-ACT OK: RP- ACT: R.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: E.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: F. & B. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: ZONE DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: COMMENTS: DPR-ACT = Damper Actuator RP-ACT = Replace Actuator FILTER SECTION N/A: X OK: REPLACE: SIZE: COMMENTS: REPLACE FAN BEARINGS: SUPPLY AIR FAN OK: X COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X COMMENTS: RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COMMENTS: COOLING COIL SIZE: RP-BD: N/A: X OK: REPLACE: CNTLVLV OK: RP-ACT: HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BD: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV RP-BD: OK: RP- ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV RP-BD: OK: RP- ACT: COMMENTS: BURNER IN GOOD CONDITION RP-BD = Replace Body AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: N/A: X DUCT INSULATION OK: MISSING: **ESTIMATED QUANTITY:** COMMENTS:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7178

FILE:

	AIR	HANDLI	NG UNIT - HVAC			TIONS	
AHU NO.:	UH-2	LOCATION	ON (Rm) ONE F	ROOM BLDG IN			
HU TYPE:	GAS FIRED L		EM		MODEL:	UH-1100	
SZ - Single Zone		ating & Vntltr	•	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	pe)
/IZ - Mulitzone		able Air Vol.		Reheat System			
DD - Dual Duct	UH - Unit I	Heater	IND -	Induction System			
D.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
COMMENTS:							DPR-ACT = Damper Actuato:
							RP-ACT = Replace Actuator
FILTER SECTION	N/A: X	OK:	REPLACE:	SIZE:		·	
COMMENTS:							
SUPPLY AIR FAN	OK: X	REPLAC	E FAN BEARINGS:	COMMEN	ITS:		
SUPPLY FAN MOTOR	OK: X	REPLAC	E:	COMMEN	ITS:		
NLET VANES	N/A: X	IOK:	COMMENTS:				
RETURN AIR FAN	OK:		E FAN BEARINGS:	COMMEN	ITS:	N/A	
RETURN FAN MOTOR	OK:	REPLAC		COMMEN		N/A	
COMMENTS:							
	][N/A: X	lok:	REPLACE:	SIZE:	CNTLVLV	lok:	RP- ACT: RP-BD:
COOLING COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP-BD:
COOLING COIL HEATING COIL	11					11	
COOLING COIL HEATING COIL PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT; RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK:	REPLACE: REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP-BD: RP- ACT: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP-BD: RP- ACT: RP-BD: RP- ACT: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X BURNER	OK: OK: OK: IN GOOD C	REPLACE: REPLACE: REPLACE: ONDITION	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR	N/A: X N/A: X N/A: X BURNER	OK: OK: OK: IN GOOD C	REPLACE: REPLACE: ONDITION REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X BURNER	OK: OK: OK: IN GOOD C	REPLACE: REPLACE: REPLACE: ONDITION	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X BURNER	OK: OK: OK: IN GOOD C	REPLACE: REPLACE: ONDITION REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X BURNER	OK: OK: OK: IN GOOD C	REPLACE: REPLACE: ONDITION REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	ОК: ОК: ОК:	RP- ACT:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X BURNER	OK: OK: OK: IN GOOD C	REPLACE: REPLACE: ONDITION REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	ОК: ОК: ОК:	RP- ACT:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7178

FILE:

· 7178.XLS

	AIR I	HANDLIN	IG UNIT - HVAC	UPGRADE	OBSERVA [*]	TIONS	
AHU NO.:	·	1,5 LOCATIO	· /	TH WALL			
	NDOW AC UN		FEDDER		MODEL:	N/A	
SZ - Single Zone		ating & Vntltn	-	Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	pe)
MZ - Mulitzone	1	iable Air Vol.		- Reheat System			
DD - Dual Duct	UH - Unit	Heater	IND	<ul> <li>Induction System</li> </ul>			
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
ZONE DAMPER	- N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
COMMENTS:	TYPICAL	OF 3. APPEA	AR TO BE IN POOR C	ONDITION			DPR-ACT = Damper Actuator
							RP-ACT = Replace Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:			
COMMENTS:							
SUPPLY AIR FAN	OK: X	REPLACI	E FAN BEARINGS:	COMMEN	NTS:		
SUPPLY FAN MOTOR	OK: X	REPLACI		COMMEN	NTS:		
INLET VANES	N/A: X	OK:	COMMENTS:			<del> </del>	
RETURN AIR FAN	OK:		E FAN BEARINGS:	COMMEN	NTS:	N/A	<del></del>
RETURN FAN MOTOR	OK:	REPLACI		COMMEN		N/A	
COMMENTS:		1121 2 101		Toomme			
OOMMENTO.							
COOLING COIL	Maria.	lok: x	IDEDI ACE	IO17E	CNTLVIV	Tou	RP- ACT: RP-BD
HEATING COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: OK:	
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP-BD
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-BD
COMMENTS:	INA. A	JON.	INEFLACE.	JOIZE.	CIVILVEV	Or.	
COMMENTS:							RP-ACT = Replace Actuator
							RP-BD = Replace Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:							
PIPE INSULATION	N/A: X	OK:	MISSING:	IESTIMAT	ED QUANTITY:		
FIFE INSULATION							
	N/A· X	IOK.	IMISSING:	I -> HMAI	FITCHARD Y		
DUCT INSULATION	N/A: X	ок:	MISSING:	ESTIMAT	ED QUANTITY:		
	N/A: X	OK:	MISSING:	JESTIMAT	ED QUANTITY:	·	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/12/93

LOCATION: FT. RILEY, KS

PREPARED BY: AJN./CWW

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7636 BLDG NAME: REGIMENTAL HQ BLDG

ELECTRIC METER: N
GAS METER: Y

SUSPECT ACM: Y

CONDITIONED SQFT:

9,850

SAT:

0

24

0

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 9

JLE NO: 9

SUN: MON: TUE: WED: THUR: FRI: PRES START: 0 0 0 0 PRES STOP: 24 24 24 24 24 **REQ START:** 0 9 9 9 9 9 0 17 REQ STOP: 17 17 17 17

REMARKS:

Suspect ACM located on pipe fittings

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/93 PREPARED BY: AJN./CWW

Antin	ANDLING GIVE			
BUILDING NUMBER AHU NUMBER		AHU LOCATION	MER	,
REFRIG SYS # SRVNG A		SERVES AREA:	ALL	10
	% OF	BLDG AREA HEATED:		10
AHU UNIT TYPE SINGL	LE ZONE	NU	MBER OF ZONES I	F MZ UNIT: 0
CFM-HTG:	825	CFM-CLG:	82	25
MIN %OA:	100	MAX %OA:	1	00
NAMEPLATE				adament .
UNIT MFG:	DUNHAM BUSH	UNI	T MODEL: HAH-12	2-C
SUPPLY FAN HP:	0.5	RET/EXI	I FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN	MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MT		
COMMENTS:		1,2,1,2,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1		
COILS				
Coil	Coil Type	Modulating	Valve?	
PREHEAT COIL:	NONE			
HEATING COIL:				
REHEAT COIL:	be	<b>_</b>		
HUMIDIFIER:				
COOLING COIL:				
00021110 0012				
SCHEDULE			MONTH SCHEDU	JLE NO: 3
DAY SCHEDULE NO:	9		WION IN SCREDO	JE NO. 3
SCHEDULE COMMENTS:				
SUN:	MON: TUE: WE	D: THUR: FRI:	SAT:	
PRES START: 0	0 0	0 0 0	0	
PRES STOP: 24	24 24 2	24 24 24	24	
REQ START: 0	9 9	9 9 9	0	
REQ STOP: 0	17 17	<u>17 17 17 </u>	0	
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT:	NOV: DEC:
ON:				$\boxtimes$
CONTROLS				
TYPE OF CON	ITROLS: PNEUMATIC		MOSTAT TYPE: SI	NGLE SETPOINT 0
PRESENT TEMP WINT	TR OCC:	0	DECK DEG F:	0
PRESENT TEMP WINTR	UNOCC:	0.	ED AIR DEG F:	0
PRESENT TEMP SU	IM OCC:		DINT DESCRIP:	
PRESENT TEMP SUM			POINT DEG F:	0
MIN OA DMPR CONTRO	DL: N MIXED AIF	R DMPR CONTROL: N	IMPLEMENT DE	MAND LIMIT CNTRLS?
MAX OA DMPR CONTRO	DL: Y ECONOMI	ZER DB CONTROL: N		TIME CLOCK:
RET AIR DMPR CONTRO		ZER WB CONTROL: N	TIME CL	OCK OPERATIONAL?
EXH AIR DMPR CONTRO OTHER CONTROLS				
				1

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO:** 1406-001 **DATE:** 10/12/93 **PREPARED BY:** AJN./CWW

AITTANDENTO ONT	OUTVET OBOLITY/THORTO
BUILDING NUMBER: 7636  AHU NUMBER: FC-1	AHU LOCATION:
REFRIG SYS # SRVNG AHU: CH-1	SERVES AREA: ALL
	BLDG AREA HEATED: 80
AHU UNIT TYPE FAN COILS - 2 PIPE	NUMBER OF ZONES IF MZ UNIT: 0
<b>CFM-HTG:</b> 8,600	<b>CFM-CLG:</b> 8,600
MIN %OA:	MAX %OA: 0
NAMEPLATE	
UNIT MFG: DUNHAM BUSH	UNIT MODEL: CR-4-FC-4-1
SUPPLY FAN HP: 1.7	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 9	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED:	THUR: FRI: SAT:
PRES START: 0 0 0 0	0. 0 0
PRES STOP: 24 24 24 24	24 24 24
REQ START: 0 9 9 9 9 17 17 17	9 9 0
REQ STOP:01717	17 17.
	UN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖾 🖾 🖾 🖾	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	THERMOSTAT TYPE: OTHER
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
	COLD DECK DEG F: 0
	MIXED AIR DEG F:
	O OTHER SETPOINT DESCRIP:  O OTHER SETPOINT DEG F:  O
MIN OA DMPR CONTROL: N MIXED AIR DI	MPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?
	R DB CONTROL: N TIME CLOCK:
	R WB CONTROL: N TIME CLOCK OPERATIONAL?
RELAIR DIVIER CONTROL. IN I ECONOMIZER	THE COUNTY OF EIGHORAL!
EXH AIR DMPR CONTROL:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/12/93 PREPARED BY: AJN./CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER: 7636	BOILER RM LOCATION: MER	
BOILER UNIT		
—SOURCE OF BLDG HEAT	BLR/CONVERTER SERVES AREA OR SERVICE: ALL	
· · · · · · · · · · · · · · · · · · ·		
BOILER	CONVERTER	
BOILER TAG: BLR-1	CONVERTER TAG:	
BOILER TYPE: HW (UP T		_ :
FUEL TYPE: NAT. GAS	CONV HT SOURCE:	
CENTRAL PLANT DIRECT		
NAMEPLATE	% AREA HEATED BY BB RADIATION:	10
BOILER MFG: AJAX	BLR CAP OUTPUT (BTUH): 360,000	7
UNIT MODEL: WG-450	BLR CAP INPUT (BTUH): 450,000	
COMMENTS:		-
		-
SCHEDULE		
DAYS SCHEDULE NO: 9	MONTH SECHDULE NO:	1
SCHEDULE COMMENTS:		1707900
SUN: MON	N: TUE: WED: THUR: FRI: SAT:	
PRES START: 0	0 0 0 0 0	
PRES STOP: 24 2	24 24 24 24 24	
REQ START: 0	9 9 9 9 0	
<b>REQ STOP</b> : 0 1	7 17 17 17 0	
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	_
ON:		
CONTROLS		Aller
TYPE OF BLR CONTROLS	S: PNEUMATIC RESET CONTROLS: Y	
OPERATING SETPOINT	T: 135 DEG F or PSIG	
TYPE OF BURNER CONTROLS	3:	
CONTROLS COMMENTS	3:	
HW PUMP		
PUMP TAG: 1	PUMP HP: 0.5 PUMP MFG: B&G	
PUMP SERVICE: HW PUMP	PLIMP MODEL: M80027K48	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO**: 1406-001 **DATE**: 10/12/93

PREPARED BY: AJN./CWW

# PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	7636				BLDG N	AME:	REGIME	NTAL HC	BLDG			
PER RAD	(SYSTE	M TAG) NO	: RAD	)-1			RAD S	YS LOCA	TION:	MER			
	•	HEATING	har	-1			S	SERVES A	AREA:	STAIRWA	Y, HALL	WAYS	
RAD	IATION I	UNIT TYPE	E: HW					% AREA	нтс:		1	0	
RADIA	TION	PUMI	>										
PUMP T	AG: 1			PUM	P HP:	0	.5	PUMP	MFG:	BELL & G	OSSETT	•	
	-							PUMP M	ODEL:	M80027K	48		
SCHED	ULE												
DA	YS SCHI	EDULE NO	):	4	-	MON	ITHS SC	HEDULE	NO:		1		
SCHE	DULE C	OMMENTS	3:										
		SUN:	MON:	TUE:			UR:	FRI:	SAT:				
PRES S		0	0	0		0		0	0				
PRES	STOP:	24	24	24		24	24	24	24				
REQ S	TART:	0	6	6		_6	6	6	0				
REQ	STOP:	0	17	17	<u> </u>	17	17	17	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	<del></del>
ON:	$\boxtimes$		$\boxtimes$	$\boxtimes$						$\boxtimes$	$\boxtimes$	$\boxtimes$	:
CONTR	ROLS												
TY	PE OF R	AD. CON	rols:	ELECT	RIC								
	RADIA	TION CON	TROL:										
	OC	C HT SPA	CE SP		0								
		C HT SPA			0			R	ESET C	ONTROL:	N		
	CONTR	OL COM	MENTS:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO:** 1406-001 **DATE:** 10/12/93

PREPARED BY: AJN./CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

REF. UNIT NUMBER/TAG:   CH-1	BLDG NUMBER:	7636	BL	DG NAME: F	REGIMENTAL HQ BL	DG		
NAMEPLATE	REF. UNIT NUMBER	₹/TAG: CH-1			LOCATION (M	IER#):	OUTSIDE	
CHILLER MFG:   TSI					AHU'S SEF	RVED:	FC-1, AHU	<u>-1</u>
CHILLER MFG: TSI		UNIT TYPE	RECIPROCATING	WITH AIR CO	OLED CONDENSIN	G UNIT		-
CHILLER MODEL: 30A0CD30  # OF TOWER FANS: 4 CHILLER SERIAL NO: 5-98-13126  TOWER FAN W: 0 CHILLER AMPS: 53 CHILLER AMPS: 1 CHILLER AMPS: 53 CHILLER CAP (TONS): 29.8  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 9  MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	NAMEPLATE	<u>=</u>					mages 1	
CHILLER MODEL: 30.00CD30  # OF TOWER FANS: 4 CHILLER SERIAL NO: 5-88-13126  TOWER FAN V: 0 CHILLER CHILLER MMPS: 53 CHILLER AMPS: 53 CHILLER PH: 3 CHILLER CAP (TONS): 29.8  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 9  MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 REG STOP: 24 24 24 24 24 24 24 24 24 REQ START: 0 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	CHILLER N	IFG: TSI			TOWER MFG:	,		
CHILLER SERIAL NO: 5-88-13126			 D30	# (				4
CHILLER AMPS: 53	CHILLER SERIAL		***		TOWER FAN V:			0
CHILLER PH: 3 CHILLER CAP (TONS): 29.8  COMMENTS:    SCHEDULE	CHILLE	R V:	208	TC	WER FAN AMPS:			0
CHILLER CAP (TONS): 29.8  COMMENTS:    COMMENTS:   SCHEDULE NO: 9   MONTHS SCHEDULE NO: 2	CHILLER AN	MPS:	53		TOWER FAN HP:			1
COMMENTS:   SCHEDULE NO:   9	CHILLER	PH:	3					
DAYS SCHEDULE NO:   9   MONTHS SCHEDULE NO:   2	CHILLER CAP (TO	NS):	29.8					
DAYS SCHEDULE NO: 9 MONTHS SCHEDULE NO: 2  SCHEDULE COMMENTS:    SUN: MON: TUE: WED: THUR: FRI: SAT:	COMME	NTS:						
SCHEDULE COMMENTS:   SUN: MON: TUE: WED: THUR: FRI: SAT:	SCHEDULE	<u> </u>						
SUN: MON: TUE: WED: THUR: FRI: SAT:   PRES START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			9		MONTHS SCHEDU	E NO:	2	
PRES START: 0 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	SCHEDULE CO	MMENTS:			·			
PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24		SUN: MO	N: TUE: WE	D: THUR:	FRI: SAT:			
REQ START:   0   9   9   9   9   9   9   0	PRES START:	0	0 0	0 0	0 0			
REQ STOP:   0   17   17   17   17   17   17   0	PRES STOP:	24	24 24	24 24	24 24			
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:								
CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	REQ STOP:	0	17 17	17 17	0			
CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	MONTHS JAN:	FFR: MAR	· APR· MAY·	.IUN: .III	I · Alig · SEP ·	ОСТ	· NOV·	DEC:
TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	ON:						_	
TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT: 0  CWR SETPOINT: 0 CNWR SETPOINT: 0  PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS:  PRESS LITE LOW: N TEMP LITE LOW: N  PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	L	<u> </u>						
CWS SETPOINT: 0 CNWS SETPOINT: 0  PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	CONTROLS							
CWS SETPOINT: 0 CNWS SETPOINT: 0  PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS:  PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	TYPE OF C	CONTROLS:	FI FCTRIC					
CWR SETPOINT: 0 CNWR SETPOINT: 0  PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY								
PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY								
PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	CWR	SETPOINT:		0	CNWR SETPOINT:			0
PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	PRE	SS LITE HI:	N TEM	IP LITE HI:	N OTHER INC	CATIO	RS:	
PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY			=	<u> </u>				<del></del> .
CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY				<u></u>	=			
PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	CONTROL	_S COMMENT						
PUMP TAG: 1 PUMP HP: 5 PUMP MFG: CENTURY	CW and CNV	V PUMP	S					
				5	PUMP MFG-	CENT	URY	
		/ PUMP (Chille			PUMP MODEL:	-		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 9 Nov-94

CHECKED BY:

AJN AJN

BLDG:

7636

FILE:

		,		7636		FILE:	7636.XLS	<u> </u>
	AIR	HANDLIN	G UNIT - HVAC	UPGRADE (	OBSERVA [*]	<b>FIONS</b>		
AHU NO.:	AHU-1	LOCATION		<del> </del>				
AHU TYPE:	SZ	MFG.:	DUNHAM-BUSH		MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltng	. FC - F	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - I	nduction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator .
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:				
COMMENTS:			•					
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			L
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	ОК:	REPLACE		COMMEN	ITS:	N/A		
COMMENTS:								
O GRANILITY O.								
		× • • • • • • • • • • • • • • • • • • •						
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	NONE	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	e Actuator
						<del></del>	RP-BD = Replace	Body
			THE VALUE OF THE V				<del></del>	
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
<u> </u>								
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			
DUCT INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY:			
COMMENTS:		1= //	1	1-2				
JOIVIIVILIN 1 3.								
	·······				<del></del> .			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

7636.XLS

CWW AJN

CHECKED BY: FILE: 763

CHILLER / EQUIP. NO.				VAC UPGRADE OBSERVATIONS	
		CH-1	LOCATION (RM)	OUTSIDE	
REFG. EQUIP. TYPE:	Mate Cide C	R-ACCU	MFG.: TSI	MODEL: 50 2C520	
C-WCT = Centrifugal w/		-		J = Reciprocating w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating ACCU = Air Cooled Con				CT = Absorption w/ Water Side Cooling Tower poling Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:			ONDENSER OUTSIDE;	——————————————————————————————————————	
		MP. SYSTEM			
COOLING TOWER	N/A:	OK: X	REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	ок: х	REPLACE:	SIZE:	
COMMENTS:			4.4		
CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: 5 HP	
	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS		IOI	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	OK:		l e e e e e e e e e e e e e e e e e e e	
CHW PUMP MOTOR CHW PUMP SEALS	N/A:	ОК:	REPLACE:	SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:	
CHW PUMP MOTOR	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	

7636

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7636

FILE:

BOILE	R & CON	IVERTER - HVAC	UPGRADE	OBSERV	ATIONS	
).	BLR-1	LOCATION (RM)	MER			
	HW	MFG.: AJAX		MODEL:	WG-450	
		MFG.:		1		
			4	-		
				estic Hot Wa		
ATMOSPI	HERIC: X	POWER:	OK:		REPLACE:	
		4				
					· · · · · · · · · · · · · · · · · · ·	<del></del>
Thua.	Tor.	IDEDLACE.	ICIZE.			
III .		1				
JIN/A:	JUN:	INEFLACE.	JOILE.			
			· · · · · · · · · · · · · · · · · · ·			
1Ν/Δ·	IOK: X	IMISSING:	IESTIMATE	OLIANTITY	/·	
	1					
IL						
N/A:	OK: X	REPLACE:	SIZE:	3/4 HP		
<u> </u>						
13		1				
11					·	
				· · · · · · · · · · · · · · · · · · ·		
III .		1				
N/A:	јок:	REPLACE:	SIZE:			
				* 10		
N/A· ¥	IOK.	IREDI ACE:	ISIZE:			
	15	1	17			
					· · · · · · · · · · · · · · · · · · ·	
N/A: X	OK:	MISSING:	ESTIMATE	QUANTIT'	Y:	
	STM/HW HTHW/HV ATMOSPI  N/A: N/A: N/A: N/A: N/A: 3-WAY V/	N/A: OK: X N/A: X N/A	D. BLR-1 LOCATION (RM) HW MFG.: AJAX MFG.: STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv.  ATMOSPHERIC: X POWER:  N/A: OK: REPLACE: N/A: OK: X MISSING: N/A: OK: X MISSING: N/A: OK: X MISSING: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: REPLACE:	D. BLR-1 LOCATION (RM) MER  HW MFG.: AJAX  MFG.:  STM/HW - Steam to Hot Water Conv. HTHW/STM  HTHW/HW - High Temp. HW to HW Cv. DHW - Dom  ATMOSPHERIC: X POWER: OK:  N/A: OK: REPLACE: SIZE:  N/A: OK: REPLACE: SIZE:  N/A: OK: X MISSING: ESTIMATE  3-WAY VALVE ABOVE. SMALL PUMP LEAKING AND ACTUATO  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: REPLACE: SIZE:	D. BLR-1 LOCATION (RM) MER  HW MFG.: AJAX MODEL:  MFG.: MODEL:  STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv.  DHW - Domestic Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv.  DHW - Domestic Hot Water Conv.  N/A: OK: REPLACE: SIZE:  N/A: OK: REPLACE: SIZE:  N/A: OK: MISSING: ESTIMATED QUANTITY  N/A: OK: X MISSING: ESTIMATED QUANTITY  N/A: OK: X MISSING: ESTIMATED QUANTITY  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:	HW   MFG.: AJAX   MODEL: WG-450   MFG.:   MODEL: WG-450   MFG.:   MODEL: WG-450   MFG.:   MODEL: WG-450   MFG.:   MODEL: WG-450   MODEL: WG-

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

#### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 8056 BLDG NAME: DET DAY ROOM

ELECTRIC METER: N

GAS METER: N
SUSPECT ACM: N

CONDITIONED SQFT:

2,100

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 6

THUR: FRI: SUN: MON: TUE: WED: SAT: 0 0 0 0 0 PRES START: 0 24 24 24 24 24 PRES STOP: 24 24 6 8 0 6 6 6 6 REQ START: 21 21 21 11 21. REQ STOP: 0 21. ;

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

PREPARED BY: JM

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/11/94

AIT HAIDEING OITH	CONTET COCENTATIONS
BUILDING NUMBER: 8056	ANULI COATION TIED
AHU NUMBER: AHU-1	AHU LOCATION: MER
REFRIG SYS # SRVNG AHU: CENTRAL PLANT % OF	SERVES AREA: ALL BLDG AREA HEATED: 100
AHU UNIT TYPE SINGLE ZONE	NUMBER OF ZONES IF MZ UNIT: 0
<b>CFM-HTG:</b> 2,770	CFM-CLG: 2,770
MIN %OA: 10	MAX %OA: 100
NAMEPLATE	
UNIT MFG: TRANE	UNIT MODEL: L-6-SR-76E00435
SUPPLY FAN HP: 1.5	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: DAYTON	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: 2N934K	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	<b>_</b>
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 6	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED	: THUR: FRI: SAT:
PRES START: 0 0 0 0	0 0 0
PRES STOP: 24 24 24 24	4 24 24 24
<b>REQ START:</b> 0 6 6 6	6 6 8
REQ STOP: 0 21 21 21	1 21 21 11
	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF CONTROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXED AIR I	DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?
	ER DB CONTROL: N TIME CLOCK:
	R WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N	in a second control of the control o
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

8056

FILE:

AHU NO.:	AHU-1	LOCATIO	G UNIT - HVAC UNIT - MER			· · · · · · · · · · · · · · · · · · ·		
AHU TYPE:	SZ	MFG.:	TRANE		MODEL:	L-6	····	
SZ - Single Zone		ating & Vntltng		n Coil (Indicate				
MZ - Mulitzone		able Air Vol.	, , , , , ,	ar con (molodio	2. 10. 2 7 1pc cr	101 11 Ipc	<b>7</b> 1	
DD - Dual Duct	UH - Unit I		∃ND - Ir	nduction System				
D.A. DAMPER	N/A:	IOK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
& B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
OMMENTS:		NTERLOCKE	D. WHITE RUST ON G	ALVANIZED		<u> </u>	DPR-ACT = Dampe	er Actuator
Olimizatio.			N AHU-CASING				RP-ACT = Replace	
ILTER SECTION	N/A:	JOK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
NLET VANES	N/A: X	IOK:	COMMENTS:	100				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		14//\		
COMMENTS:	OK.	INLFLACE		COMMEN	110.			
JOIMINEN 15.								
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	IOK: X	RP- ACT:	RP-BD:
JOOLING COIL		OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
JEATING COIL	IINI/A:		INCI BAOL.		•	11		RP-BD:
	N/A:		REPLACE:	SIZE:	ICNTI VI V	IIOK.	IRP-ACT	
PREHEAT COIL	N/A:	ОК:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	1
PREHEAT COIL REHEAT COIL			REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: OK:	RP- ACT:	RP-BD:
PREHEAT COIL REHEAT COIL	N/A:	ОК:				II.	RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL	N/A:	ОК:				II.	RP- ACT:	RP-BD:
PREHEAT COIL REHEAT COIL	N/A:	ОК:				II.	RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A:	OK: OK:	REPLACE:	SIZE:		II.	RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A:	OK: OK:	REPLACE:	SIZE:		II.	RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: X OK: X	REPLACE:	SIZE:		II.	RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A:	OK: OK: OK: X OK: X	REPLACE:	SIZE:		II.	RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: X OK: X	REPLACE:	SIZE:		II.	RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: NEW PUM	OK: OK: OK: X OK: X	REPLACE:  REPLACE:  REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: NEW PUM	OK: OK: OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE:   SIZE:   SIZE:	CNTLVLV  ED QUANTITY:	OK:	RP- ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: N/A: N/A: N/A: N/A: N/A: NEW PUM N/A: N/A: N/A:	OK: OK: OK: X OK: X OK: X OK: OK: OK:	REPLACE:  REPLACE:  REPLACE:  MISSING:  MISSING:	SIZE:  SIZE:  SIZE:  SIZE:  ESTIMAT  ESTIMAT	ED QUANTITY:	OK:	RP-ACT:  RP-ACT = Replace  RP-BD = Replace §	RP-BD:
PREATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION DUCT INSULATION COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: NEW PUN N/A: N/A: N/A: ALL INSU	OK: OK: OK: X OK: X OK: X IP OK: OK: LATION NEE	REPLACE: REPLACE: REPLACE:	SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:	ED QUANTITY: ED QUANTITY: CONDENSATE	OK:	RP-ACT:  RP-ACT = Replace  RP-BD = Replace §	RP-BD Actualor

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

#### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7243 BLDG NAME: ADMIN & SUPPORT BLDG

ELECTRIC METER: N

GAS METER: N

SUSPECT ACM: Y

CONDITIONED SQFT: 17

17,829

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 2

FRI: SUN: MON: TUE: WED: THUR: SAT: PRES START: 0 0 0 0 0 0 24 24 PRES STOP: 24 24 24 24 7 7 7. 7 7 0 0 **REQ START:** 17 17 17 0 REQ STOP:

## **REMARKS:**

Suspect ACM on pipe fittings for chilled water; HW piping has fiberglass insulation. At least one person in each of 6 Admin Support areas 24hr a day. 15 Friedrich AC units "Power Miser". In original building each stroage area has one exhaust fan for ventilation. Perimeter radiation througout original building. Additional building: storage area has large FC ~ 1/2 HP Htg. only, no control VLV, fan control only.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/11/94
PREPARED BY: AJN/CWW

BUILDING NUMBER: 7243	1	
AHU NUMBER: EF-1	AHU LOCATION	N: SUPPORT AREA
REFRIG SYS # SRVNG AHU: N/	SERVES AREA:	SUPORT AREA
<u></u>	% OF BLDG AREA HEATED:	
AHU UNIT TYPE EXH. FAN	N	UMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	0 CFM-CLG:	14,975
MIN %OA:	100 MAX %OA:	100
NAMEPLATE		
UNIT MFG:	UN	IIT MODEL:
SUPPLY FAN HP:	3 RET/EX	(H FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN	MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MT	
COMMENTS: Supply	Fan HP represents 5 Exhaust Fans, one fo	r each area.
COILS		
Coil	Coil Type Modulating	Valve?
PREHEAT COIL: NONE		
HEATING COIL: NONE		
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: NONE		
SCHEDULE		
DAY SCHEDULE NO: 2		MONTH SCHEDULE NO: 2
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI:	SAT:
PRES START: 0 0	0 0 0 0	0
PRES STOP: 24 24	24 24 24 24	24
REQ START: 0 7	7 7 7 7	0
REQ STOP: 0 17	<u>17</u> <u>17</u> <u>17</u> <u>17</u>	0
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONTROLS:	ELECTRIC THERM	MOSTAT TYPE: OTHER
PRESENT TEMP WINTR OCC:	: 0	DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	COLD	D DECK DEG F: 0
PRESENT TEMP SUM OCC:		ED AIR DEG F: 0
PRESENT TEMP SUM UNOCC:		POINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N		The second of th
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:	Exhaust fans have gravity dampers	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE:** 10/11/94

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

	7243		
AHU NUMBER:	FC-1	AHU LOCATION: ABOVE CEILING	
REFRIG SYS # SRVNG AHU:		SERVES AREA: ADDITION ADMIN AREA G AREA HEATED:	7
AHU UNIT TYPE FAN COIL	S - 2 PIPE	NUMBER OF ZONES IF MZ UNIT:	
CFM-HTG:	1,800	CFM-CLG: 1,800	
MIN %OA:	0	MAX %OA: 0	
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	-
SUPPLY FAN HP:	1	RET/EXH FAN HP:	
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	-
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	=
COMMENTS: To	otal for 4 FC Units; Dual Temp	1.	-
COILS			
Coil	Coil Type	Modulating Valve?	
	ONE		
HEATING COIL: HO		<del> </del>	
REHEAT COIL: NO			
	ONE	<b>L</b>	
COOLING COIL: CV	V		
SCHEDULE			
DAY SCHEDULE NO:	2	MONTH SCHEDULE NO:	3
SCHEDULE COMMENTS:			
SUN: MC	ON: TUE: WED: TH	IUR: FRI: SAT:	<del></del> -
PRES START: 0	0 0 0	0 0 0	1
PRES STOP: 24	24 24 24	24 24 24	0
REQ START: 0 ENGINEER OF THE CONTROL OF T	7 7 7 7	$\frac{7}{17} = \frac{7}{17} = \frac{0}{0}$	
REGUIOF			
MONTHS JAN: FEB: MAF	R: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV: DEC	:
			•
CONTROLS			
TYPE OF CONTROL	LS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPO	
		HOT DECK DEG F:	0
PRESENT TEMP WINTR OC	CC: 70	001 D DEOK 550 5	
PRESENT TEMP WINTR OC PRESENT TEMP WINTR UNOC		COLD DECK DEG F:	0
PRESENT TEMP WINTR UNO	CC: 0	MIXED AIR DEG F:	
	CC: 0 CC: 70		0
PRESENT TEMP WINTR UNOC PRESENT TEMP SUM UNOC PRESENT TEMP SUM UNOC	CC: 0 CC: 70 CC: 0	MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0. 0.
PRESENT TEMP WINTR UNOO PRESENT TEMP SUM UNOO MIN OA DMPR CONTROL:	CC: 0 CC: 70	MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:  CONTROL: N IMPLEMENT DEMAND LIMIT	0 0 0 CNTRLS?
PRESENT TEMP WINTR UNOO PRESENT TEMP SUM UNOO MIN OA DMPR CONTROL:	CC:         0           CC:         70           CC:         0   MIXED AIR DMPR	MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:  CONTROL: N IMPLEMENT DEMAND LIMIT CONTROL: N TIM	0 0 0 CNTRLS?
PRESENT TEMP WINTR UNOO PRESENT TEMP SUM UNOO MIN OA DMPR CONTROL: MAX OA DMPR CONTROL: RET AIR DMPR CONTROL:	CC:         0           CC:         70           CC:         0           N         MIXED AIR DMPR           ECONOMIZER DB	MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:  CONTROL: N IMPLEMENT DEMAND LIMIT CONTROL: N TIM	0 0 0 CNTRLS?
PRESENT TEMP WINTR UNOO PRESENT TEMP SUM UNOO MIN OA DMPR CONTROL: MAX OA DMPR CONTROL: RET AIR DMPR CONTROL:	CC:	MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:  CONTROL: N IMPLEMENT DEMAND LIMIT CONTROL: N TIME CONTROL: N TIME CLOCK OPERA	0 0 0 CNTRLS?

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**CONTROLS COMMENTS:** 

**EMC NO**: 1406-001 **DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER								
			AHU LOCAT	ION, SUB	DODT A	DEA		
AHU NUMBEI	R: <u>H&amp;V-1</u>		And LOCA	10N. <u>50P</u>	PORTA	KEA		
REFRIG SYS # SRVNG A	HU:		SERVES ARI		ORT ARE	A ADDIT	<del></del>	
•		% OF BLDG	AREA HEATE	D: -			13	
AHU UNIT TYPE HEAT	ING AND VENTILAT	ING		NUMBER	OF ZONI	ES IF MZ	UNIT: 0	
CFM-HTG:	2,0	00	CFM-CI	.G:		0		
MIN %OA:		100	MAX %	A:		100		
NAMEPLATE								
UNIT MFG:				UNIT MODI	≣L:			
SUPPLY FAN HP:	0.3	3	RET	EXH FAN I	łP:		0	
SUPPLY FAN MTR MFG:		==	RET/EXH F	AN MTR MI	•G:			
SUPPLY FAN MTR MODEL:		F	RET/EXH FAN	MTR MOD	EL:		And the second s	
COMMENTS:							· · · · · · · · · · · · · · · · · · ·	
COILS								
Coil	Coil Type		Modulat	ing Valve?				
PREHEAT COIL:	NONE							
HEATING COIL:	HOT WATER							
REHEAT COIL:	NONE		_ 🛮					
HUMIDIFIER:			_ 📙					
COOLING COIL:	NONE		_ ⊔					
SCHEDULE								
DAY SCHEDULE NO:	2			MON	тн ѕсн	EDULE NO	D: 1	
SCHEDULE COMMENTS:								
SUN:	MON: TUE:	WED: THU	JR: FRI:	SAT:				
PRES START: 0	0 0	0	0 0	0				
PRES STOP: 24	24 24	24	24 24	24				
REQ START: 0	7 7	7	7 7	0				
REQ STOP: 0	17 17	17	17 17	0				
MONTHS IAN FER	MAR. APR. M	AV. JHN.	JUL - AU	G. SEP.	OCT:	NOV:	DEC:	
MONTHS JAN: FEB: ON:		AY: JUN:	JUL: AU		OCT:	NOV:	DEC:	
		AY: JUN:	JUL: AU		OCT: ⊠	NOV:	DEC:	
ON:						****	1	
ON: ⊠ ⊠		J D	П П	ERMOSTAT	TYPE:		SETPOINT	
ON: 🖂 🖂	TROLS: ELECTRIC	J D	ТН	ERMOSTAT	TYPE:		SETPOINT 0	
ON:   CONTROLS  TYPE OF CON	TROLS: ELECTRIC		тн	ERMOSTAT HOT DECK OLD DECK	TYPE: DEG F: DEG F:		SETPOINT  0 0	
ON:  CONTROLS  TYPE OF CON  PRESENT TEMP WINTE OF CON  PRESENT TEMP WINTE OF CON	TROLS: ELECTRIC		ТН	ERMOSTAT HOT DECK OLD DECK MIXED AIR	TYPE: DEG F: DEG F:		SETPOINT 0	·
ON:  CONTROLS  TYPE OF CON  PRESENT TEMP WINT	TROLS: ELECTRIC		TH C	ERMOSTAT HOT DECK OLD DECK	TYPE: DEG F: DEG F: SCRIP:		SETPOINT  0 0	:
ON:  CONTROLS  TYPE OF CON  PRESENT TEMP WINTE  PRESENT TEMP SUM OF TEMP SUM O	TROLS: ELECTRIC TR OCC: UNOCC: UNOCC: UNOCC:	0 0 0 0	TH C OTHER SE OTHER	ERMOSTATHOT DECKOLD DECK	TYPE: DEG F: DEG F: SCRIP: DEG F:	SINGLE	SETPOINT  0 0 0 0	
ON:  CONTROLS  TYPE OF CON  PRESENT TEMP WINTE  PRESENT TEMP SU  PRESENT TEMP SU  PRESENT TEMP SUM  MIN OA DMPR CONTRO	TROLS: ELECTRIC TR OCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC:	0 0 0 0	TH C OTHER SE OTHER CONTROL:	ERMOSTATHOT DECKOLD DECK	TYPE: DEG F: DEG F: SCRIP: DEG F:	SINGLE	SETPOINT  0 0 0 0 LIMIT CNTRLS?	=
ON:  CONTROLS  TYPE OF CON  PRESENT TEMP WINTE  PRESENT TEMP SU  PRESENT TEMP SU  PRESENT TEMP SUM  MIN OA DMPR CONTRO  MAX OA DMPR CONTRO	TROLS: ELECTRIC TROCC: UNOCC:	O O O O O O O O O O O O O O O O O O O	TH  COTHER SE  OTHER  CONTROL:    CONTROL:	ERMOSTAT HOT DECK OLD DECK MIXED AIR TPOINT DE SETPOINT I	TYPE: DEG F: DEG F: SCRIP: DEG F:	SINGLE	SETPOINT  0 0 0 0 LIMIT CNTRLS?	N
ON:  CONTROLS  TYPE OF CON  PRESENT TEMP WINTE  PRESENT TEMP SU  PRESENT TEMP SU  PRESENT TEMP SUM  MIN OA DMPR CONTRO	TROLS: ELECTRIC TROCC: UNOCC:	0 0 0 0	TH  COTHER SE  OTHER  CONTROL:    CONTROL:	ERMOSTATHOT DECKOLD DECK	TYPE: DEG F: DEG F: SCRIP: DEG F:	SINGLE	SETPOINT  0 0 0 0 LIMIT CNTRLS?	N N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/11/94 PREPARED BY: AJN/CWW

BUILDING NUME										
A LLS I SII I I I I I I I I I I I I I I I										
And Nomi	BER: UH-	1		AHU L	OCATIO	N: ADD	TION S	TORAGE	ROOM	
REFRIG SYS # SRVNG	AHU:			SERVES	AREA:	STORA	GE RO	DM		
			% OF BL	DG AREA H	EATED:				2	
AHU UNIT TYPE UN	IT HEATER	₹	:		N	UMBER (	OF ZONI	ES IF MZ	UNIT:	0
CFM-HT	G:		220	CF	M-CLG:	1		0		
MIN %C	-		0		X %OA:	1		0		
NAMEPLATE										
UNIT MF	G:				UN	IT MODE	L:			
SUPPLY FAN H		0.	.04		RET/EX	H FAN H	IP:		0	
SUPPLY FAN MTR MF	G: ====			RET/E	XH FAN	MTR ME	G:			
SUPPLY FAN MTR MODE	EL:			RET/EXH	FAN M	TR MODE	:L:			
COMMENT	rs:									
COILS										
Coil		Coil Type		Mo	dulating	Valve?				
PREHEAT CO	IL: NONE									
HEATING CO	IL: HOT	NATER								
REHEAT CO	IL: NONE									
HUMIDIFIE	R: NONE									
COOLING CO	IL: NONE			□						
SCHEDULE										
DAY SCHEDULE NO	: 2					MONT	וח פטחו	DULE N	<u> </u>	1
						MICIA	11 3011	DOLL IN	U:	1
SCHEDULE COMMENTS	:					IVIOIT	11 3011	DOLE N	<u>.                                    </u>	
SCHEDULE COMMENTS		TUE:	WED:	THUR:	FRI:	SAT:	- TOOTIL	DOLE N	O:	,
SUN		0	WED:	0	0	<b>SAT</b> :		EDOLE IN	O:	1
SUN	: MON:	24	0 24	0 24	0 24	SAT:		EDOLE IN	J:	
PRES START: 0 PRES STOP: 24 REQ START: 0	: MON: 0 0 4 24 0 7	0 24 7	0 24 7	0 24 7	0 24 7	SAT: 0 24 0		EDOLE IN	<u>.                                    </u>	
PRES START: 0 PRES STOP: 24 REQ START: 0	: MON:	0 24 7	0 24	0 24	0 24	SAT: 0 24		ESOLE IV	U:	
PRES START: COMMENTED START: COMME	: MON: 0 0 4 24 0 7 0 17	0 24 7 17	0 24 7	0 24 7 17	0 24 7	SAT: 0 24 0	OCT:	NOV:	DEC:	
PRES START: COMPANY OF THE PRES STOP: COMPANY OF THE PRES STORY OF	: MON: 0 0 4 24 0 7 0 17	0 24 7 17	0 24 7 17	0 24 7 17 N: JUL:	0 24 7 17	SAT: 0 24 0 0				
PRES START: COMPANY OF THE PRES STOP: COMPANY OF THE PRES STOP: COMPANY OF THE PRES STOP: COMPANY ON: COMPANY ON: COMPANY ON: COMPANY OF THE PRES STOP: COMPANY ON: COMPANY OF THE PRES STOP: COMPANY OF THE PRES STOP: COMPANY OF THE PRES STORY OF T	: MON: 0 0 4 24 0 7 0 17 MAR:	0 24 7 17	0 24 7 17	0 24 7 17 N: JUL:	0 24 7 17	SAT: 0 24 0 0 SEP:	OCT:	NOV:	DEC:	
PRES START: COMPANY OF THE PRES STOP: COMPANY OF THE PRES STOP: COMPANY OF THE PRES STOP: COMPANY ON: SUN PRES STOP: COMPANY ON: SUN PRES STOP: COMPANY OF THE PRES STORY OF THE P	: MON: 0 0 4 24 0 7 0 17  MAR:  ⊠	0 24 7 17 APR: I	24 7 17 MAY: JU	0 24 7 17 N: JUL:	0 24 7 17 17 AUG:	SAT: 0 24 0 0 SEP:	OCT:	NOV:	DEC:	
PRES START: PRES STOP: PRES STOP: PREQ START: REQ STOP: ON:  CONTROLS  SUN SUN SUN FEB: CONTROLS	: MON: 0 0 4 24 0 7 0 17  MAR:  ⊠	0 24 7 17 APR: I	24 7 17 MAY: JU	0 24 7 17 N: JUL:	0 24 7 17 AUG:	SAT:  0 24 0 0 SEP:	OCT:	NOV:	DEC:	NT 0
PRES START: PRES STOP: PRES STOP: REQ START: REQ STOP:  MONTHS JAN: FEB: ON:  CONTROLS	: MON: 0 0 4 24 0 7 0 17  MAR:  ☑  ■  ■  ■  ■  ■  ■  ■  ■  ■  ■  ■  ■	0 24 7 17 APR: I	24 7 17 MAY: JU	0 24 7 17 N: JUL:	AUG:  THERM HOT	SAT:  0 24 0 0 SEP:  MOSTAT DECK I	OCT:  TYPE: DEG F: DEG F:	NOV:	DEC:	NT O
PRES START: PRES START: PRES STOP: REQ START: REQ STOP: ON:  MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CO PRESENT TEMP WINTE	: MON: 0 0 4 24 0 7 0 17  MAR:  ☑ ONTROLS: NTR OCC: R UNOCC:	0 24 7 17 APR: I ⊠	0   24   7   17	0 24 7 17 17 N: JUL:	AUG:  THERM HOT COLL MIX	SAT:  0 24 0 0 SEP:  MOSTAT T DECK I	OCT:  TYPE: DEG F: DEG F: DEG F:	NOV:	DEC:	NT 0
PRES START: COPE OF CO	MON:  0 4 24 0 7 0 17  MAR:   DNTROLS:  NTR OCC:  R UNOCC:	0 24 7 17 APR: I	0   24   7   17	0 24 7 17 17 N: JUL:	AUG:  THERM HOT COLE MIX R SETPO	SAT:  0 24 0 0 SEP:  MOSTAT DECK I	OCT:  TYPE: DEG F: DEG F: DEG F: SCRIP:	NOV:	DEC:	NT O
PRES START: COPE S	MON:  0 4 24 7 7 17 MAR:  W  DNTROLS:  NTR OCC:  R UNOCC:  SUM OCC:  M UNOCC:	0 24 7 17 17 APR: I	0   24   7   17	0 24 7 17 17 N: JUL:	O 24 7 17 AUG: HOT COLL MIX R SETPOHER SET	SAT:  0 24 0 0 SEP:  DECK I DECK I ED AIR I DINT DES	OCT:  TYPE: DEG F: DEG F: DEG F: DEG F:	NOV:	DEC:	NT 0 0 0 0 0 0 0
PRES START: PRES START: PRES STOP: REQ START: REQ STOP: ON:  MONTHS JAN: FEB: ON:  TYPE OF CO PRESENT TEMP WINT PRESENT TEMP WINT PRESENT TEMP SUI	MON:  24 24 27 27 27 27 28 29 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	D 24 7 17 APR: I	0   24   7   17	0 24 7 17 17 N: JUL:	THERM HOT COLL MIX R SETPOLE N	SAT:  0 24 0 0 SEP:  DECK I DECK I ED AIR I DINT DES	OCT:  TYPE: DEG F: DEG F: DEG F: DEG F:	NOV:	DEC:	NT 0 0 0 0 0 0 0
PRES START: PRES START: PRES STOP: REQ START: REQ STOP: ON:  MONTHS JAN: FEB: ON:  TYPE OF CO PRESENT TEMP WI PRESENT TEMP WIT PRESENT TEMP SUI MIN OA DMPR CONTE	MON:  24 24 27 27 27 27 27 27 27 27 27 27 27 27 27	ELECTR  MIX ECC	MAY: JU  IC  O  O  O  ED AIR DM  ONOMIZER	OTHE OTHER	AUG:  THERM HOT COLE MIX R SETPOHER SET OL: N	SAT:  0 24 0 0 SEP:  DOBECK I	OCT:  TYPE: DEG F: DEG F: DEG F: SCRIP: DEG F:	NOV:	DEC:  SETPOII  LIMIT CI	NT 0 0 0 0 0 0 NTRLS? NCLOCK: N
PRES START: COPE S	MON:  24 24 27 27 27 27 28 28 29 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	ELECTR  MIX ECC	MAY: JU  IC  O  O  O  ED AIR DM  ONOMIZER	OTHE OTH	AUG:  THERM HOT COLE MIX R SETPOHER SET OL: N	SAT:  0 24 0 0 SEP:  DOBECK I	OCT:  TYPE: DEG F: DEG F: DEG F: SCRIP: DEG F:	NOV:  SINGLE  DEMAND	DEC:  SETPOII  LIMIT CI	NT 0 0 0 0 0 0 NTRLS? NCLOCK: N
PRES START: COPE S	MON:  0 0 4 24 0 7 17  MAR:  NTROLS: RUNOCC: RUNOCC: ROL: ROL: ROL: ROL: N ROL: N ROL: N	ELECTR  MIX ECC ECO	MAY: JU  IC  O  O  O  ED AIR DM  ONOMIZER	OTHE OTH	AUG:  THERM HOT COLE MIX R SETPOHER SET OL: N	SAT:  0 24 0 0 SEP:  DOBECK I	OCT:  TYPE: DEG F: DEG F: DEG F: SCRIP: DEG F:	NOV:  SINGLE  DEMAND	DEC:  SETPOII  LIMIT CI	NT 0 0 0 0 0 0 NTRLS? NCLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER: 7243	BOILER RM LOCATION: MER	
<b>BOILER UNIT</b>		
	BLR/CONVERTER SERVES AREA OR SERVICE: ALL	
SOURCE OF BLDG HEAT		_
● <u>BOILER</u>	CONVERTER	
BOILER TAG: BLR-1	CONVERTER TAG:	
BOILER TYPE: HW (UP TO 2		
FUEL TYPE: NAT. GAS	CONV HT SOURCE:	
CENTRAL PLANT DIRECT		!
NAMEPLATE	% AREA HEATED BY BB RADIATION:	0
BOILER MFG: BURNHAM	BLR CAP OUTPUT (BTUH): 850,000	
UNIT MODEL: 4FW-127-50-16	BLR CAP INPUT (BTUH): 1,063,000	
COMMENTS:		
SCHEDULE		
DAYS SCHEDULE NO: 2	MONTH SECHDULE NO: 1	
SCHEDULE COMMENTS:	MIONTA SECADOLE NO.	
SUN: MON:	TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0	0 0 0 0 0 0	
PRES STOP: 24 24	24 24 24 24 24	
REQ START: 0 7	7 7 7 0	
REQ STOP: 0 17	17 17 17 0	
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
ON: ⊠ ⊠ ⊠		
CONTROLS		
CONTROLS		
TYPE OF BLR CONTROLS:	PNEUMATIC RESET CONTROLS: Y	
OPERATING SETPOINT:	105 DEG F or PSIG	
TYPE OF BURNER CONTROLS:		
CONTROLS COMMENTS:		
HW PUMP		
PUMP TAG: 1	PUMP HP: 0.5 PUMP MFG: ARMSTRONG	
PUMP SERVICE: HW PUMP	PUMP MODEL: 1QA56B17D77H	
HW PUMP		
PUMP TAG: 2	PUMP HP: 0.5 PUMP MFG: ARMSTRON	_
PUMP SERVICE: HW PUMP	PUMP MODEL: 1QA56B17D77H	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

# PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUMBER:	7243			:	BLDG N	AME:	ADMIN &	SUPPO	RT BLDG			
PER RAD (SYSTE		: RAD	-1				YS LOCA		PERIMET		3	, representation - A. Ant
	F HEATING				[		ERVES A		ORIG BLI			
RADIATION							% AREA	нтс.		7	8	
KADIATION	ONII IIFE						70 AILEA				_	
RADIATION	N PUMP	<u> </u>									<del></del>	
PUMP TAG:	1		PUM	P HP:	- 0	0.5	PUMP	MFG:	BELL & C	OSSETT	•	
							PUMP M	DDEL:				
SCHEDULE	-											
DAYS SCI	HEDULE NO	):	2		MOM	NTHS SC	HEDULE	NO:		1.		
SCHEDULE (	COMMENTS	:										
	SUN:	MON:	TUE:	WE		UR:	FRI:	SAT:				
PRES START:	0	0	0			_ 0 _	0	0				
PRES STOP:	24	24	24		24	24	24	24				
REQ START:	0	7	7		7 =	<del></del>		0				
REQ STOP:	0	17	17		17	17.		0				
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$						$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTROLS	3											
TYPE OF	RAD. CONT	ROLS:										
RADI	ATION CON	TROL:	NONE									
0	CC HT SPA	CE SP:		0								
	CC HT SPA			0			R	ESET C	ONTROL:	N		
CONT	ROL COMM	IENTS:	ELECTI	RIC CO	NTROL	ON PUN	IPS					_

**PROJECT NAME:** EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/11/94

PREPARED BY: AJN/CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

With the second	
NAMEPLATE	
CHILLER MFG:	
CHILLER MFG: CHILLER MODEL: CHILLER SERIAL NO: CHILLER V: CHILLER AMPS: CHILLER AMPS: CHILLER PH: CHILLER CAP (TONS): COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 0 0 PRES STOP: 2 4 24 24 24 24 24 24 24 24 24 24 24 24	
CHILLER MODEL: # OF TOWER FAN S: 0 CHILLER SERIAL NO: TOWER FAN V: 0 CHILLER V: 0 TOWER FAN AMPS: 0 CHILLER AMPS: 0 TOWER FAN AMPS: 0 CHILLER PH: 0 CHILLER CAP (TONS): 0  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 2 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS:  PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 REQ START: 0 7 7 7 7 7 7 7 0 REQ STOP: 0 17 17 17 17 17 17 0  MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DE ON:	
CHILLER MODEL: # OF TOWER FAN S: 0 CHILLER SERIAL NO: TOWER FAN V: 0 CHILLER V: 0 TOWER FAN AMPS: 0 CHILLER AMPS: 0 TOWER FAN AMPS: 0 CHILLER PH: 0 CHILLER CAP (TONS): 0  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 2 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS:  PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 REQ START: 0 7 7 7 7 7 7 7 0 REQ STOP: 0 17 17 17 17 17 17 0  MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DE ON:	
CHILLER SERIAL NO:	
CHILLER AMPS: 0 TOWER FAN HP: 0 CHILLER PH: 0 CHILLER CAP (TONS): 0  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 2 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 REQ START: 0 7 7 7 7 7 7 0 REQ STOP: 0 17 17 17 17 17 17 0  MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DE ON:	
CHILLER PH: 0 CHILLER CAP (TONS): 0  COMMENTS:    SCHEDULE	
CHILLER CAP (TONS): 0  COMMENTS:     SCHEDULE	
SCHEDULE	
DAYS SCHEDULE NO:   2   MONTHS SCHEDULE NO:   2	
DAYS SCHEDULE NO: 2           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	
SCHEDULE COMMENTS:   SUN: MON: TUE: WED: THUR: FRI: SAT:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START:         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""><td></td></td<>	
PRES START:         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""><td></td></td<>	
PRES STOP:         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24	
REQ START:       0       7       7       7       7       7       0         REQ STOP:       0       17       17       17       17       17       0     MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEON:  ON:  CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT:  O CNWS SETPOINT:  O CNWS SETPOINT:  OCUMPATED INTO CONTROLS: ELECTRIC  CWS SETPOINT:  OCUMPATED INTO CONTROLS:	
REQ STOP:       0       17       17       17       17       17       0         MONTHS JAN:       FEB:       MAR:       APR:       MAY:       JUN:       JUL:       AUG:       SEP:       OCT:       NOV:       DE         ON:       Image: Description of the control	
ON:	
ON:	
	C:
TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT:	] :
CWS SETPOINT: 0 CNWS SETPOINT:	<u></u>
The state of the s	
With the second	_
CWR SEIPOINT:	0
<del></del>	<u>0</u>
PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS:	
PRESS LITE LOW: N TEMP LITE LOW: N	
PRESS GAUGES: N TEMP GAUGES: N	
CONTROLS COMMENTS:	
CW and CNW PUMPS	
PUMP TAG: 1 PUMP HP: 0.5 PUMP MFG: ARMSTRONG	
PUMP SERVICE: CW PUMP (Chilled Water) PUMP MODEL: 1QA56B17D77H	<del></del>

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN AJN

7243 CHECKED BY: 7243.XLS

	AIR H	ANDLIN	G UNIT - HVAC L	PGRADE C	BSERVAT	IONS		
AHU NO.:	WAC-1	LOCATION	` '	I. OFFICES - WI	VDOW OPENIN	GS -		
AHU TYPE: \	WINDOW AC UNI	T MFG.:	FRIEDRICH		MODEL:			
SZ - Single Zone	H&V - Heat	-	•	an Coil (Indicate :	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone	VAV - Varia	able Air Vol.		Reheat System				
DD - Dual Duct	:UH - Unit H	leater	IND - I	nduction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:			NITS; 3 WAC'S PER ADM	/IIN/SUPPORT U	NIT.		DPR-ACT = Dampi	er Actuator
	WAC'S AR	E FAIR TO	POOR CONDITION.				RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:	IN/A.	JOIN. X	THE BIOL.	10,22,				
CONTRICTO.						Limit		
SUPPLY AIR FAN	OK: X	REPLAC	E FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLAC	Œ:	COMMEN	NTS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLAC	E FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLAC	Œ:	COMMEN	NTS:	N/A		
COMMENTS:								
OOMINETY O.		<u> </u>						
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	e Actuator
<del></del>							RP-BD = Replace	Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				-
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
				TEOT NA	ED OULLES			
PIPE INSULATION	N/A: X	OK:	MISSING:		ED QUANTITY:			
DUCT INSULATION	N/A: X	OK:	MISSING:	[ESTIMAT	TED QUANTITY:			
COMMENTS:								

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY: 7243.XLS

	AIR	TANULIN	<b>GUNIT-HVACI</b>	JPGKADE	ODSERVA			
AHU NO.:	FC-1	LOCATIO	N (Rm) ABOVE	E CEILING PANI	EL IN ADDITION	J		
AHU TYPE:	FC 2P	MFG.:	· · · · · · · · · · · · · · · · · · ·					
SZ - Single Zone	H&V - Hea	ating & Vntltng	ng & Vntltng. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pip					
MZ - Mulitzone		iable Air Vol.	-	Reheat System	•	,	,	
DD - Dual Duct	UH - Unit	Heater		nduction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	THESE A	RE IN NEW A	DDITION ONLY. WIND	OW AC UNITS I	N		DPR-ACT = Damp	er Actuator
	5 COMPA	NY AREAS.					RP-ACT = Replac	e Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:	DIRTY FIL							
				···		1		
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMEN				
				1				
	N/A: X	IOK:	COMMENTS:					
NLET VANES	N/A: X	OK:	COMMENTS:	ICOMMEN	JTS:	N/A		
INLET VANES RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN		N/A		
INLET VANES RETURN AIR FAN RETURN FAN MOTOR			FAN BEARINGS:	COMMEN		N/A		
NLET VANES RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARINGS:			N/A		
NLET VANES RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARINGS:			N/A		
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK: OK:	REPLACE	E FAN BEARINGS: E:	COMMEN	NTS:		IRP- ACT	IRP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK:	REPLACE	E FAN BEARINGS: E: REPLACE:	COMMEN	NTS:	(NONE)	RP- ACT:	RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK: N/A:	REPLACE REPLACE	E FAN BEARINGS: E:	SIZE:	CNTLVLV CNTLVLV	(NONE)	RP- ACT:	RP-BD:
NLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: N/A: X	REPLACE REPLACE OK: X OK:	REPLACE:	COMMEN	NTS:	(NONE)		_ !
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK:  N/A: N/A: X N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK:  N/A: N/A: X N/A: X N/A: X	REPLACE  OK: X  OK:  OK:  OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
NLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK:  N/A: N/A: X N/A: X N/A: X	REPLACE  OK: X  OK:  OK:  OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK:  N/A: N/A: X N/A: X N/A: X	REPLACE  OK: X  OK:  OK:  OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	OK: OK:  N/A: N/A: X N/A: X N/A: X	REPLACE  OK: X  OK:  OK:  OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X N/A: X DUAL TEM	OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
NLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION DUCT INSULATION	N/A: X	OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7243

FILE: 7243.XLS

		BLDG:	243		FILE:	7243.XLS	
AIR H	IANDLIN	G UNIT - HVAC L	JPGRADE (	DBSERVAT	TIONS		
EF-1	LOCATION	N (Rm) SUPPO	RT AREA				
EXH. FA				MODEL:	· · · · · · · · · · · · · · · · · · ·		
H&V - Hea	ting & Vntltng	. FC - Fa	n Coil (Indicate 2	P for 2 Pipe or	4P for 4 Pip	e)	
VAV - Vari	able Air Vol.	RHT - F	Reheat System				
UH - Unit F	leater	IND - Ir	duction System				
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	ОК:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
GRAVITY	DAMPERS - (	OK .				DPR-ACT = Damp	er Actuator
						RP-ACT = Replace	Actuator
N/A: X	OK:	REPLACE:	SIZE:				
OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:			
OK: X	REPLACE		COMMEN	TS:			
N/A: X	OK:	COMMENTS:					
OK:	REPLACE	FAN BEARINGS:	COMMEN	TS:	N/A		
	REPLACE	•	COMMEN	TS:	N/A		
N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
<u></u>					<u> </u>	RP-ACT = Replace	Actuator
				····		RP-BD = Replace	Body
-							
N/A: X	OK:	REPLACE:	SIZE:				
N/A: X	OK:	REPLACE:	SIZE:				
				····			
N/A: X	OK:	MISSING:	ESTIMATI	D QUANTITY:			
iliw∆. ∧		i e					
<u> </u>	OK:	MISSING:	ESTIMAT	D QUANTITY:			
N/A: X	ок:	MISSING:	ESTIMATI	ED QUANTITY:			
<u> </u>	ОК:	MISSING:	ESTIMATI	ED QUANTITY:			
	EF-1 EXH. FA H&V - Hea VAV - Vari. UH - Unit F N/A: X N/A: X N/A: X N/A: X OK: X OK: X OK: X OK: X OK: X OK: X N/A: X	EF-1 LOCATION EXH. FAN MFG.: H&V - Heating & Vntltng VAV - Variable Air Vol. UH - Unit Heater N/A: X OK: OK: N/A: X OK: N/A: X OK: OK: OK: REPLACE OK: REPLACE OK: REPLACE OK: REPLACE OK: REPLACE N/A: X OK:	EF-1 LOCATION (Rm) SUPPO EXH. FAN MFG.:  H&V - Heating & Vntltng. FC - Fa VAV - Variable Air Vol. RHT - F UH - Unit Heater IND - In  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  OK: REPLACE:  OK: REPLACE:  OK: REPLACE:  OK: REPLACE:  N/A: X OK: REPLACE:	EF-1 LOCATION (Rm) SUPPORT AREA  EXH. FAN MFG.:  H&V - Heating & Vntltng. VAV - Variable Air Vol.  UH - Unit Heater  N/A: X OK: REPLACE: SIZE:  OK: REPLACE: SIZE:  OK: X REPLACE: SIZE:  OK: REPLACE: SIZE:  N/A: X OK: COMMENTS:  OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:	EF-1 LOCATION (Rm) SUPPORT AREA  EXH. FAN MFG.:   MODEL:  H&V - Heating & Vntltng.   FC - Fan Coil (Indicate 2P for 2 Pipe or VAV - Variable Air Vol.   RHT - Reheat System  UH - Unit Heater   IND - Induction System  N/A: X   OK:   REPLACE:   SIZE:   DPR-ACT   N/A: X   OK:   REPLACE:   SIZE:   N/A: X   OK:   REPLACE:   COMMENTS:   N/A: X   OK:   COMMENTS:   N/A: X   OK:   COMMENTS:   N/A: X   OK:   REPLACE:   COMMENTS:   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   N/A: X   OK:   REPLACE:   SIZE:   CNTL	EXH. FAN MFG.:  H&V - Heating & Vntiting.  VAV - Variable Air Vol.  UH - Unit Heater  IND - Induction System  IND - Induction	EF-1 LOCATION (Rm) SUPPORT AREA  EXH. FAN MFG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7243

FILE:

CHILLER / EQUIP. NO.			EQUIPMENT	- HVAC UPGI	VADE ODS	PERVAIIONS	
		CWP-1	LOCATION (RM	l) MER			
REFG. EQUIP. TYPE:			MFG.: AF	RMSTRONG	MODEL:	1QA56B17D77F	1
C-WCT = Centrifugal w/ \	Nater Side C	cooling Tower	R-	ACCU = Reciprocat	ng w/ Air Coole	ed Condensing Unit	
R-WCT = Reciprocating v		e Cooling Tov		BB-WCT = Absorption	n w/ Water Side	e Cooling Tower	
ACCU = Air Cooled Cond	lensing Unit		СТ	= Cooling Tower			
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:			<u></u>				
COOLING TOWER	N/A: X	JOK:	REPLACE:	SIZE:	<del></del>		
AIR COOLED COND.	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:	JIVA. A	1011.	INCI DAOL.	JOIZE.		<del></del>	
COMMENTO.							
CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMA	TED QUANTIT	Y:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMA	TED QUANTIT	Y:	
CHW PUMP MOTOR	N/A:	ОК: X	REPLACE:	SIZE:			
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		***************************************	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			- <del> </del>
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:							

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7243

FILE:

	BOILE	R & CON	VERTER - HVAC (	JPGRADE OBS	ERV	ATIONS
BOILER/CONVERTER NO	).	BLR-1	LOCATION (RM)	MER		
BOILER TYPE:		HW	MFG.: BURNHAI			4FW-127-50-LB
CONVERTER TYPE:			MFG.:	MOD		
STM - Steam			t Water Conv.	•		HW to Steam Convertor
HW - Hot Water			. HW to HW Cv.	DHW - Domestic H	lot Wa	
BOILER BURNER	ATMOSPI		POWER: X	OK: X		REPLACE:
COMMENTS:	BOILER L	OOKS GOOL	D. DUAL TEMP. SYSTEM.	ELECTRIC CONTRO	LS	
BLR PUMP MOTOR	N/A: X	lok:	REPLACE:	SIZE:		
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		- 44. A
	IV/A. A	JON.	INCIPLACE.	JOIZL.		
COMMENTS:						2020.0
BLR INSULATION	N/A:	ок: х	MISSING:	ESTIMATED QUA		
PIPE INSULATION	N/A:	OK:	MISSING: X	ESTIMATED QUA	NTITY	: 25' @ 1-1/2"
COMMENTS:	CORROS	ION ON PIPE				
HW PUMP MOTOR	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:		
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		13.00.00.00.00.00.00
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:	-		AD IN THE PAST. PUMPS	UN-INSULATED. SC	ME C	ORROSION ON
	PIPES CO	ONNECTED T	O PUMPS			
				To the second se		
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X	OK: OK:	REPLACE:	SIZE:		
	111					
CV PUMP SEALS	111					
CV PUMP SEALS	111			SIZE:		
CV PUMP SEALS COMMENTS:	N/A: X	OK:	REPLACE:	SIZE:		
CV PUMP SEALS COMMENTS: CV INSULATION	N/A: X	OK:	REPLACE:  MISSING:	SIZE:		
CV PUMP SEALS COMMENTS:  CV INSULATION CV PIPE INSUL.	N/A: X	OK:	REPLACE:  MISSING:	SIZE:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER:	7432		ADMIN & SUPPORT BLDG
ELECTRIC METER:	N	CONDITIONED SQFT:	13,500

GAS METER: Y
SUSPECT ACM: N

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHOUL	E NO:	3					
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	7	7	7.	7	7	0
PRES STOP:	0	17	17	17	17	17	0
REQ START;	0	7	7		7	7	0
REQ STOP:	0	17	17	17	17	17	0

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER: 7432 AHU NUMBER: FC-1	AHU LOCATION: ABOVE CEILING
REFRIG SYS # SRVNG AHU: CH-1	SERVES AREA: ADMIN AREA
	% OF BLDG AREA HEATED: 35
AHU UNIT TYPE FAN COILS - 2 PIPE	NUMBER OF ZONES IF MZ UNIT: 0
And the second s	2,000 CFM-CLG: 12,000
MIN %OA:	20 MAX %OA:20
NAMEPLATE	
UNIT MFG: TRANE	UNIT MODEL: UNITRANE
SUPPLY FAN HP:	2 RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS: Total of 20 FCs	in Admin. Area
COILS	
Coil Coil Type	e Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	$\boxtimes$
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 3	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON: TUE:	WED: THUR: FRI: SAT:
PRES START: 0 7 7	7 7 0
PRES STOP: 0 17 17	
REQ START: 0 7 7	
REQ STOP: 0 17 17	<u>17</u> <u>17</u> <u>0</u>
MONTHS JAN: FEB: MAR: APR: ON:	MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
CONTROLS  TYPE OF CONTROLS: PNEUM	THERMOSTAT TYPE: DUAL SETPOINT
TYPE OF CONTROLS: PNEUM. PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
TYPE OF CONTROLS: PNEUM	68 HOT DECK DEG F: 0 COLD DECK DEG F: 0
TYPE OF CONTROLS: PNEUM PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC:	68 COLD DECK DEG F: 0  MIXED AIR DEG F: 0
TYPE OF CONTROLS: PNEUM PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC:	HOT DECK DEG F: 0   0   0   0   0   0   0   0   0   0
TYPE OF CONTROLS: PNEUM PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: N MIX	HOT DECK DEG F: 0
TYPE OF CONTROLS: PNEUM PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: N MIX MAX OA DMPR CONTROL: N ECC	HOT DECK DEG F: 0
TYPE OF CONTROLS: PNEUM PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: N MAX OA DMPR CONTROL: N ECC	HOT DECK DEG F: 0
TYPE OF CONTROLS: PNEUM PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: N MIX MAX OA DMPR CONTROL: N ECC	HOT DECK DEG F: 0
TYPE OF CONTROLS: PNEUM PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: N MAX OA DMPR CONTROL: N ECC	HOT DECK DEG F: 0

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW

BUILDING NUMBER: 7432	
AHU NUMBER: HV-1	AHU LOCATION: SUPPLY AREA
REFRIG SYS # SRVNG AHU:	SERVES AREA: SUPPLY AREA 1
% OF	BLDG AREA HEATED: 13
AHU UNIT TYPE HEATING AND VENTILATING	NUMBER OF ZONES IF MZ UNIT: 0
<b>CFM-HTG</b> : 2,400	CFM-CLG: 0
MIN %OA: 100	MAX %OA: 100
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP: 1	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:  COMMENTS:	RET/EXH FAN MTR MODEL:
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	— п
HEATING COIL: HOT WATER	<u> </u>
REHEAT COIL: NONE	
HUMIDIFIER: NONE	<u>-</u>
COOLING COIL: NONE	
SCHEDULE	
DAY SCHEDULE NO: 2	MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED:	THUR: FRI: SAT:
PRES START: 0 0 0 0	0 0 0
PRES STOP: 24 24 24 24	24 24 24
REQ START: 0 7 7 7	7 7 0
REQ STOP: 0 17 17 17	
	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖾 🖾 🖂 🔲 📗	
CONTROLS	
TYPE OF CONTROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F: 0
PRESENT TEMP SUM OCC:	MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DESCRIP. 0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXED AIR D	MPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? Y
	R DB CONTROL: N TIME CLOCK: N
	R WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL:	
OTHER CONTROLS DESCR:	
CONTROL & COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

CONTROLS COMMENTS:

**DATE:** 10/11/94

EMC NO: 1406-001

LOCATION: FT. RILEY, KS PREPARED BY: AJN/CWW AIR HANDLING LINIT SURVEY ORSERVATIONS

AIR HANDLING UNIT SURVEY OBSERVATIONS
BUILDING NUMBER: 7432  AHU NUMBER: HV-2  AHU LOCATION: SUPPLY AREA
REFRIG SYS # SRVNG AHU: SERVES AREA: SUPPLY AREA 2  % OF BLDG AREA HEATED: 13
AHU UNIT TYPE HEATING AND VENTILATING NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: 2,400 CFM-CLG: 0 MIN %OA: 100 MAX %OA: 100  NAMEPLATE
UNIT MFG:  SUPPLY FAN HP:  SUPPLY FAN MTR MFG:  SUPPLY FAN MTR MODEL:  COMMENTS:  UNIT MODEL:  RET/EXH FAN HP:  0  RET/EXH FAN MTR MFG:  RET/EXH FAN MTR MODEL:  COMMENTS:
COILS
Coil Coil Type Modulating Valve?  PREHEAT COIL: NONE □  HEATING COIL: HOT WATER □  REHEAT COIL: NONE □  HUMIDIFIER: NONE □  COOLING COIL: NONE □
SCHEDULE
DAY SCHEDULE NO: 2 MONTH SCHEDULE NO: 1 SCHEDULE COMMENTS:
SUN:         MON:         TUE:         WED:         THUR:         FRI:         SAT:           PRES START:         0         0         0         0         0         0           PRES STOP:         24         24         24         24         24         24         24           REQ START:         0         7         7         7         7         7         0           REQ STOP:         0         17         17         17         17         17         0
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:
CONTROLS
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT  PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: 0  PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0  PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0  PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0  MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? ECONOMIZER DB CONTROL: N TIME CLOCK: ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N  OTHER CONTROLS DESCR:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER	R: 7432		
AHU NUMBER	₹: HV-3	AHU LOCATION:	UPPLY AREA
REFRIG SYS # SRVNG A	HU:	SERVES AREA: SU	PPLY AREA 3
NEI WOOLO # OKKINO A		OG AREA HEATED:	13
AHU UNIT TYPE HEAT	ING AND VENTILATING	NUMBE	ER OF ZONES IF MZ UNIT: 0
CFM-HTG:	2,400	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT M	ODEL:
SUPPLY FAN HP:	1	RET/EXH FA	N HP: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR	MFG:
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MO	ODEL:
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valv	e?
PREHEAT COIL:	NONE		
HEATING COIL:	HOT WATER	$\boxtimes$	
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	2	M	ONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:	<del></del> ,		
SUN:	MON: TUE: WED:	THUR: FRI: SAT	•
PRES START: 0	0 0 0		· D
PRES STOP: 24	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	24 24 24	=
	$\frac{24}{7} = \frac{24}{7} = \frac{24}{7}$		: D
REQ START: 0 REQ STOP: 0	17 17 17		<u>.</u> )
REQ STOP: 0	<u> </u>		
MONTHS JAN: FEB:	MAR: APR: MAY: JUN	: JUL: AUG: SE	P: OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CON	TROLS: PNEUMATIC	THERMOST	AT TYPE: SINGLE SETPOINT
			CK DEG F: 0
PRESENT TEMP WINT		COLD DEC	CK DEG F: 0
PRESENT TEMP WINTR U	JNOCC: 0	MIXED A	IR DEG F: 0
PRESENT TEMP SU	M OCC: 0	OTHER SETPOINT	DESCRIP:
PRESENT TEMP SUM L		OTHER SETPOIN	NT DEG F: 0
MIN OA DMPR CONTRO	L: N MIXED AIR DMF	PR CONTROL: N IM	PLEMENT DEMAND LIMIT CNTRLS?
		===	TIME CLOCK:
	I. N ECONOMIZED	AB CONTROL INI	
MAX OA DMPR CONTRO	<del></del>		
MAX OA DMPR CONTRO RET AIR DMPR CONTRO	L: N ECONOMIZER W		TIME CLOCK OPERATIONAL?
MAX OA DMPR CONTRO	L: N ECONOMIZER W		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

DATE: 10/11/94 PREPARED BY: AJN/CWW

-					
	BUILDING NUMBER: AHU NUMBER:		AULI OCATION	: SUPPLY AREA	
	•				
	REFRIG SYS # SRVNG AH		SERVES AREA: BLDG AREA HEATED:	SUPPLY AREA 4	13
	AHU UNIT TYPE HEATIN	NG AND VENTILATING	NU	MBER OF ZONES IF MZ U	NIT: 0
	CFM-HTG:	2,400	CFM-CLG:	0	<del></del>
	MIN %OA:	100	MAX %OA:	100	
١	IAMEPLATE				
	UNIT MFG:		UNI	T MODEL:	
	SUPPLY FAN HP:	1	RET/EXI	fan HP:	0
	SUPPLY FAN MTR MFG:		RET/EXH FAN I	MTR MFG:	
	SUPPLY FAN MTR MODEL:		RET/EXH FAN MTI	R MODEL:	
	COMMENTS:	·			
	OILS				
	Coil	Coil Type	Modulating \	Valve?	
	PREHEAT COIL:	NONE			
	HEATING COIL:	HOT WATER	$\boxtimes$		
		NONE			
		NONE	<u> </u>		
	COOLING COIL:	NONE	<b>L</b>		
S	CHEDULE				
	DAY SCHEDULE NO:	2		MONTH SCHEDULE NO	1
	SCHEDULE COMMENTS:				:
	, , , , , , , , , , , , , , , , , , , ,	MON: TUE: WED:	THUR: FRI: S	SAT:	
	PRES START: 0	$\frac{0}{1}$ $\frac{0}{1}$ $\frac{0}{1}$	0 0	<u>O</u> .	İ
	PRES STOP: 24	24 24 24	24 24	24	
	REQ START: 0 0	$\begin{array}{c c} 7 & 7 & 7 \\ \hline 17 & 17 & 17 \end{array}$	$\frac{7}{17}$ $\frac{7}{17}$	0	:
_	NEGOTOT. O		11 11		· ·
ħ		MAR: APR: MAY: J	UN: JUL: AUG:	SEP: OCT: NOV:	DEC:
	ON:				$\boxtimes$
0	ONTROLS				
	TYPE OF CONTR	ROLS: PNEUMATIC	THERM	OSTAT TYPE: SINGLE S	ETPOINT
	PRESENT TEMP WINTR	occ:	0:	DECK DEG F:	0
	PRESENT TEMP WINTR UN	OCC:	0	DECK DEG F: D AIR DEG F:	O
	PRESENT TEMP SUM	occ:	OTHER SETPO		
	PRESENT TEMP SUM UN		OTHER SETP		0
	MIN OA DMPR CONTROL:	N MIXED AIR DI	MPR CONTROL: N	IMPLEMENT DEMAND LI	MIT CNTRLS? Y
	MAX OA DMPR CONTROL:	N ECONOMIZER	R DB CONTROL: N		TIME CLOCK: N
	RET AIR DMPR CONTROL:	N ECONOMIZER	WB CONTROL: N	TIME CLOCK OF	PERATIONAL? N
	EXH AIR DMPR CONTROL:	N			
	OTHER CONTROLS DE CONTROLS COMME				
	JOHN TOLO JOHN NE				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

ITRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/11/94

PREPARED BY: AJN/CWW

BUILDING NUMBER:	7432		
AHU NUMBER:		AHU LOCATION: SUPPLY A	REA
REFRIG SYS # SRVNG AHU	<b>!:</b>	SERVES AREA: SUPPLY ARE	EA 5
	% OF BLDG	AREA HEATED:	13
AHU UNIT TYPE HEATING	3 AND VENTILATING	NUMBER OF ZO	NES IF MZ UNIT: 0
CFM-HTG:	2,400	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	1	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	I .
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
-	HOT WATER		
	NONE		
	NONE NONE		
COOLING COIL.	VOINE		
SCHEDULE			
DAY SCHEDULE NO:	2	MONTH SC	HEDULE NO: 1
SCHEDULE COMMENTS:			
SUN: N	MON: TUE: WED: TH	UR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	!
REQ START: 0	7 7 7	$\frac{7}{17}$ $\frac{7}{17}$ $\frac{0}{17}$	:
REQ STOP:0	<u> 17:                                   </u>	17 17 0	:
MONTHS JAN: FEB: M.	AR: APR: MAY: JUN:	JUL: AUG: SEP: OCT	: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTR	OLS: PNEUMATIC	THERMOSTAT TYPE	SINGLE SETPOINT
PRESENT TEMP WINTR	occ: 0	HOT DECK DEG F	<del></del>
PRESENT TEMP WINTR UN	occ: 0	COLD DECK DEG F MIXED AIR DEG F	<del></del>
PRESENT TEMP SUM	OCC: 0	OTHER SETPOINT DESCRIP	
PRESENT TEMP SUM UN		OTHER SETPOINT DEG F:	
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: N IMPLEMENT	DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL:	N ECONOMIZER DB	CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL:	N ECONOMIZER WB	CONTROL: N TIM	E CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL:	N		
OTHER CONTROLS DE			
CONTROLS COMME	NIS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/11/94

PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING N	UMBER:	7432				I	BOILER	RM LOC	ATION:	MER	•	
BOILER U	NIT											
COURCE OF	. B. B. U.E	4.7	BLR/CO	NVERT	ER SER	VES ARE	A OR SE	RVICE:	ALL			
SOURCE OF		A I										
● ⊠ BOIL	-	D. D. 4					NVERT	_				_ · ·
1	ER TAG:		250 DEG)				VERTER 'ERTER '	=				
		NAT. GAS	230 DEG				HT SOL	_				
i (												
C CENTRA	L PLANT [	DIRECT										
NAMEPLA	TE				% <i>A</i>	REA HE	ATED BY	/ BB RAI	DIATION:			0
BOILER MFG:	BURNHAN	Л				BLR CA	AP OUTP	UT (BTU	H):		895,000	_
UNIT MODEL:	4FW-107-	40-1B				BLR	CAP INP	UT (BTU	H):		1,119,000	:=    -
COMMENTS:	*****											
CHEDUL	E								-			•••
DAYS SCHEDS SCHEDULE COM	2	2						MONTH	SECHE	ULE NO		1
	SUN:	MON:	TUE	- ,		IUR:	FRI:	SAT:				
PRES START PRES STOP		0 24	24		0	0		0				
REQ START		7		<del>•</del> ==	7	$\frac{24}{7} =$	$\frac{24}{7} =$	<u>24</u> 0				
REQ STOP		17	17		17	17	17	0				i
MONTHS JAN	: FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC.	_
ON:					_						DEC:	
<u> </u>	$\boxtimes$									$\boxtimes$	$\boxtimes$	_
ONTROL	S											
TYPE O	F BLR CO	NTROLS:	PNEUN	MATIC				RESE	T CONTE	ROLS: [	N	
	RATING SE		;	16	DEG F	or PSIG						
TYPE OF BU	RNER CO	NTROLS:										
CONT	ROLS COM	MENTS:										
IW PUMP												
PUMP TAG	: 1		PUN	MP HP:			5 F	PUMP ME	G: BAI	DOR		
PUMP SERVICE	: HW PUN	ЛP			1		PU	MP MODE	EL: M36	513T		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/11/94

PREPARED BY: AJN/CWW

# REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7432 BLDG N	NAME: ADMIN & SUPPORT BLDG
REF. UNIT NUMBER/TAG: CH-1	LOCATION (MER#): OUTSIDE
	AHU'S SERVED: FC-1
UNIT TYPE RECIPROCATING WIT	H AIR COOLED CONDENSING UNIT
NAMEDIATE	
NAMEPLATE	
CHILLER MFG: TRANE	TOWER MFG:
CHILLER MODEL: CGABC206AF013	# OF TOWER FANS: 2
CHILLER SERIAL NO: J87A80095	TOWER FAN V: 0
CHILLER V: 200	TOWER FAN AMPS: 0
CHILLER AMPS: 98	TOWER FAN HP: 0.5
CHILLER PH: 3	
CHILLER CAP (TONS): 20	
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 2	MONTHS SCHEDULE NO: 2
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED:	THUR: FRI: SAT:
PRES START: 0 0 0 0	0 0 0
PRES STOP: 24 24 24 24	24 24 24
REQ START: 0 7 7 7	7 7 0
REQ STOP: 0 17 17 17	<u>17 17 0</u>
	UN: JUL: AUG: SEP: OCT: NOV: DEC:
ON.	<u></u>
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	
CWS SETPOINT: 0	CNWS SETPOINT: 0
CWR SETPOINT: 0	CNWR SETPOINT: 0
PRESS LITE HI: N TEMP L	ITE HI: N OTHER INDICATIORS:
Limited States of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the	LOW: N
PRESS GAUGES: N TEMP GA	
CONTROLS COMMENTS:	
CIN and CNIN DUMPS	
CW and CNW PUMPS	
PUMP TAG: 1 PUMP HP:	3 PUMP MFG: ARMSTRONG
PUMP SERVICE: CW PUMP (Chilled Water)	PUMP MODEL:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7432

FILE:

						7432.XLS	
				OBSERVA	TIONS		
		N (Rm) SUPF	PLY AREA				
	1	3					
	-			2P for 2 Pipe or	4P for 4 Pipe	9)	
			•				
					11	1	
	t						
I		I			- It		
			SIZE:	DPR-ACT	OK:	RP- ACT:	
OA & RA	INTERLINKE	D; TYPICAL OF 5				DPR-ACT = Dampe	er Actuator
						RP-ACT = Replace	Actuator
N/A:	OK: X	REPLACE:	SIZE:				
JOK: X	IREDI ACE	FAN READINGS	ICOMMEN	ITC.			
			COMMEN	115:			
		3	LCOMMEN	170			
Juk:	REPLACE		СОММЕН	115:	N/A		
N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV			RP-BD:
N/A: X	OK:	REPLACE:				_1	RP-BD:
					<b>-</b>		RP-BD:
			10,22.	OMEVEY			1
EL TI (II (O	0 11/11 1/121						
						RP-BU = Replace B	ody
		W			**		
N/A: X	IOK:	REPLACE:	ISIZE:				
N/A: X	OK:	REPLACE:	SIZE:			• • • • • • • • • • • • • • • • • • • •	
	. 1						
					<del></del>	····	
7 17 17 17 17 17 17 17 17 17 17 17 17 17	****						
N/A:	OK: X	MISSING:	ESTIMATE	ED QUANTITY:			
N/A: N/A: X	OK: X	MISSING:		ED QUANTITY:			
	H&V-1	H&V-1 LOCATIO H&V MFG.: H&V - Heating & Vntltng VAV - Variable Air Vol. UH - Unit Heater  N/A: OK: X N/A: OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK:	H&V-1 LOCATION (Rm) SUPPLE H&V MFG.:  H&V - Heating & Vntiting.  VAV - Variable Air Vol.  N/A: OK: X REPLACE:  N/A: OK: X REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  OA & RA INTERLINKED; TYPICAL OF 5     OK: X REPLACE:    OK: X REPLACE:    N/A: X OK: COMMENTS:    OK: REPLACE:   N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:    N/A: X OK: REPLACE:	AIR HANDLING UNIT - HVAC UPGRADE  H&V-1 LOCATION (Rm) SUPPLY AREA  H&V MFG:  H&V - Heating & Vntltng. FC - Fan Coil (Indicate VAV - Variable Air Vol. RHT - Reheat System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System Induction System Induction System Induction System Induction System Induction System Induction System Induction System Induction System Induction System Induction System Induction System Induction System Induction Induction System Induction Sy	AIR HANDLING UNIT - HVAC UPGRADE OBSERVA  H&V-1 LOCATION (Rm) SUPPLY AREA  H&V MFG: MODEL:  H&V - Heating & Vntling. FC - Fan Coil (Indicate 2P for 2 Pipe or VAV - Variable Air Vol. RHT - Reheat System  UH - Unit Heater 'IND - Induction System  N/A: OK: REPLACE: SIZE: DPR-ACT  N/A: X OK: REPLACE: SIZE: DPR-ACT  N/A: X OK: REPLACE: SIZE: DPR-ACT  N/A: X OK: REPLACE: SIZE: DPR-ACT  N/A: X OK: REPLACE: SIZE: DPR-ACT  OA & RA INTERLINKED; TYPICAL OF 5    N/A: OK: REPLACE: SIZE: DPR-ACT  OK: X REPLACE: SIZE: DPR-ACT  OK: X REPLACE: SIZE: DPR-ACT  OK: X REPLACE: SIZE: DPR-ACT  OK: X REPLACE: SIZE: DPR-ACT  OK: X REPLACE: SIZE: DPR-ACT  OK: X REPLACE: SIZE: COMMENTS:  OK: X REPLACE: COMMENTS:  OK: REPLACE: COMMENTS:  OK: REPLACE: COMMENTS:  OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  LEAKING 3-WAY VALVE	AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS  H&V-1   LOCATION (Rm)   SUPPLY AREA  H&V   MFG.:   MODEL:  H&V - Heating & Vntltng.   FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe or VAV - Variable Air Vol.   RHT - Reheat System   IND - Induction System    INA:   OK:   REPLACE:   SIZE:   DPR-ACT   OK:   N/A:   OK:   REPLACE:   SIZE:   DPR-ACT   OK:   N/A:   OK:   REPLACE:   SIZE:   DPR-ACT   OK:   N/A:   X OK:   REPLACE:   SIZE:   DPR-ACT   OK:   N/A:   X OK:   REPLACE:   SIZE:   DPR-ACT   OK:   N/A:   X OK:   REPLACE:   SIZE:   DPR-ACT   OK:   N/A:   X OK:   REPLACE:   SIZE:   DPR-ACT   OK:   N/A:   X OK:   REPLACE:   SIZE:   DPR-ACT   OK:   OK:   N/A:   X OK:   REPLACE:   SIZE:   DPR-ACT   OK:   OK:   OA & RA INTERLINKED; TYPICAL OF 5    N/A:   OK:   X   REPLACE:   SIZE:   SIZE:   DPR-ACT   OK:   OK:   OK:   OK:   OK:   OMMENTS:   OK:   OMMENTS:   OK:   OMMENTS:   OK:   COMMENTS:   OK:   REPLACE:   SIZE:   COMMENTS:   OK:   REPLACE:   SIZE:   COMMENTS:   OK:   REPLACE:   SIZE:   COMMENTS:   OK:   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS	

# ${\bf E}\ {\bf M}\ {\bf C}$ ENGINEERS, INC.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

7432.XLS

DATE:

11 Nov-94

PREPARED BY:

AJN AJN

7432 CHECKED BY:

	AIR I	HANDLIN	G UNIT - HVAC	UPGRADE	ORSEKAN			
AHU NO.:	FC-1	LOCATIO	N (Rm) ABOVI	E CEILING				*
AHU TYPE:	FC 2P	MFG.:	TRANE UNITRANE		MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltng	j. FC - F	an Coil (Indicate :	2P for 2 Pipe or	4P for 4 Pipe	9)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - I	nduction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	<u> </u>
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	TYPICAL	OF 20					DPR-ACT = Damp	er Actuator
44.00.0000 · · · · · · · · · · · · · · · ·		~ <del></del>					RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMEN	ITS:			
			TOOLUGUEO					
INLET VANES	N/A: X	OK:	COMMENTS:					
			FAN BEARINGS:	COMMEN	ITS:	N/A	<u> </u>	
INLET VANES RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARINGS:	COMMEN		N/A N/A		
RETURN AIR FAN RETURN FAN MOTOR			FAN BEARINGS:					
RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARINGS:					
RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARINGS:					
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK:	REPLACE	FAN BEARINGS:				RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK: OK:	REPLACE	E FAN BEARINGS:	COMMEN	ITS:	N/A	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK:	REPLACE REPLACE	FAN BEARINGS:	COMMEN	CNTLVLV	N/A N/A		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: N/A:	REPLACE REPLACE OK: X OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	N/A OK: X OK:	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK:	REPLACE  OK: X  OK:  OK:  OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK:	REPLACE  OK: X  OK:  OK:  OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK:	REPLACE  OK: X  OK:  OK:  OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A: N/A: CONTRO	REPLACE REPLACE OK: X OK: OK: OK: L VALVE MOI	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: DULATES WHEN T-STA	SIZE: SIZE: SIZE: SIZE: SIZE: AT CALLES FOR	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR	OK: OK: N/A: N/A: N/A: N/A: CONTRO	REPLACE REPLACE OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: DULATES WHEN T-STA	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A: CONTRO	REPLACE REPLACE OK: X OK: OK: OK: L VALVE MOI	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: DULATES WHEN T-STA	SIZE: SIZE: SIZE: SIZE: SIZE: AT CALLES FOR	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: N/A: N/A: N/A: CONTRO	REPLACE REPLACE OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: DULATES WHEN T-STA	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: N/A: N/A: N/A: CONTRO	REPLACE REPLACE OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: DULATES WHEN T-STA	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	OK: OK: N/A: N/A: N/A: N/A: CONTRO	REPLACE REPLACE OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: DULATES WHEN T-STA	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
	OK: OK: N/A: N/A: N/A: N/A: N/A: X/A: X/A: X/A: X/A: X/A: X/A: X/A: X	REPLACE REPLACE OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV HEATING	N/A OK: X OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:

E M C ENGINEERS, INC.
PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7432

FILE:

CHILLER / EQUIP. NO.	REFRIGE	RATION E	QUIPMENT - HVA	AC UPGRADE OBSERVATIONS
JUILLEN / EQUIT. INU.		CH-1	LOCATION (RM)	COMPRESSOR/CONDENSOR UNIT OUTSIDE
REFG. EQUIP. TYPE:		R-ACCU	MFG.: TRANE	MODEL: CGABC206AF013
C-WCT = Centrifugal w/ W	/ater Side Co			= Reciprocating w/ Air Cooled Condensing Unit
R-WCT = Reciprocating w		-		Γ = Absorption w/ Water Side Cooling Tower
ACCU = Air Cooled Conde		Ŭ	i i	ling Tower
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE: 200 VOLTS 72.2 RLA
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE: 200 VOLTS 4.1 RLA
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:
COMP. MOTOR	N/A: X	ок:	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:	PIPE NE	DLES ALL OV	ER TOP OF UNIT AND I	N FANS.
	UNIT PRO	DDUCES CHILL	ED WATER.	
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:
COMMENTS:				
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	OK:	REPLACE: X	SIZE:
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP SEALS	IIWA:	JUN.	INCELACE.	JOIZE.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJNAJN

CHECKED BY: 7432 FILE:

	BOILE	R & CON	/ERTER -	HVAC U	GRAD	E OBSER\	/ATIONS	
BOILER/CONVERTER NO	).	BLR-1	LOCATION	(RM)	MER			
BOILER TYPE:		HW	MFG.:	BURNHAM		MODEL:	<b>4</b> FW-107-40-L	В
CONVERTER TYPE:			MFG.:			MODEL:		
STM - Steam		- Steam to Hot				•	p HW to Steam C	onvertor
HW - Hot Water		V - High Temp.				omestic Hot Wa		
BOILER BURNER	ATMOSPI	HERIC:	POWER:	Χ	OK:	Х	REPLACE:	
COMMENTS:							W-11-75-00	
· · · · · · · · · · · · · · · · · · ·				<b></b>				
					T2:			
BLR PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:			
BLR PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:	D 1 10 TO D 11 15	D. (45 NOT	
COMMENTS:			I PIPES AT C	ONNECTIONS	S TO PUM	P MOTOR AND	PUMP NOT	
	BOLTED	IO PAD.						****
BLR INSULATION	N/A:	OK: X	MISSING:		[ESTIMA]	TED QUANTIT		
PIPE INSULATION	N/A:	OK:	MISSING:	Χ	ESTIMA	TED QUANTIT	Ý: 2	25' @2"
COMMENTS:								
HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X	OK: OK:	REPLACE:		SIZE: SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:		1	
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:	1 175,77		
COMMENTS:	HOT WAT	ER PIPE LEAI	KING AT ELB	OM ABOVE L	IGH I FIXT	UKE.		
CV PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CV PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:								
CV INSULATION	N/A: X	IOK:	MISSING:		ESTIMA	TED QUANTIT	Y:	
CV PIPE INSUL.	N/A: X	OK:	MISSING:			TED QUANTIT		
COMMENTS:			<u> </u>	······································	<u> </u>			
	<del></del> .							
				<del>,</del>		***************************************		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW **BUILDING DATA SURVEY OBSERVATIONS** 

CONDITIONED SQFT:

**BLDG NUMBER: 7602** 

**BLDG NAME: ADMIN & SUPPORT BLDG** 

ELECTRIC METER: N

GAS METER: N SUSPECT ACM: Y

**BUILDING OCCUPANCY SCHEDULE** 

BUILDING SCHDULE NO: 2

SUN: MON: TUE: WED: THUR: FRI: SAT: 0 0 0 0 0 PRES START: 0 0 24 24 24 24 24 24 PRES STOP: 24 REQ START: 0 7 7 7 0 17 17 17 17 REQ STOP:

**REMARKS:** 

Locations of Suspect ACM: Pipe fittings, boiler

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

7.11.X 1.17	ANDENIO O	MIT SURVET OBSERVATIONS
BUILDING NUMBER		AHILLOCATION: STORAGE AREA
AHU NUMBER	R: AHU-1	AHU LOCATION: STORAGE AREA
REFRIG SYS # SRVNG A	HU: CH-1	SERVES AREA: OFFICE AREA 1
	Ć	% OF BLDG AREA HEATED: 0
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZONES IF MZ UNIT: 0
0.511.117.0		
CFM-HTG:		0 CFM-CLG: 940
MIN %OA:		20 MAX %OA: 20
NAMEPLATE		
UNIT MFG:		UNIT MODEL:
SUPPLY FAN HP:	0.5	5 <b>RET/EXH FAN HP</b> : 0
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	GC1921146	RET/EXH FAN MTR MODEL:
COMMENTS:		
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL:	NONE	<b>_</b>
HEATING COIL:	NONE	
REHEAT COIL:	NONE	<b>_</b>
HUMIDIFIER:	NONE	
COOLING COIL:		
COOLING COIL:	CVV	
SCHEDULE		
DAY SCHEDULE NO:	2	MONTH SCHEDULE NO: 2
SCHEDULE COMMENTS:	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	
SUN:	MON: TUE:	MED. THUD. FDI. CAT.
		WED: THUR: FRI: SAT:
	$\frac{0}{24} = \frac{0}{24} =$	$\frac{0}{34} = \frac{0}{34} = \frac{0}{34} = \frac{0}{34}$
	24 24 =	$\frac{24}{7} = \frac{24}{7} = \frac{24}{7} = \frac{24}{9}$
	$\frac{7}{17} = \frac{7}{17} =$	$\frac{7}{17} = \frac{7}{17} = \frac{7}{17} = \frac{0}{0}$
REQ STOP: 0	1717	<u> 17                                   </u>
MONTHS JAN: FEB:	MAR: APR: MA	AY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:		
<u> </u>		
CONTROLS		
TYPE OF CONT	ROLS: PNEUMATIO	
PRESENT TEMP WINTE	R OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR U		COLD DECK DEG F: 0
BERGELIE STATE		MIXED AIR DEG F: 0
PRESENT TEMP SUM PRESENT TEMP SUM U		0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL	.: N MIXED	DIAIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL		OMIZER DB CONTROL: N TIME CLOCK: N
RET AIR DMPR CONTROL		OMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL		SINIZER WE CONTROL. [IV] TIME CLOCK OPERATIONAL? [N
OTHER CONTROLS D		
CONTROLS COMM		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER: 7602 AHU NUMBER: AHU-2	AHU LOCATION: STORAGE AREA
REFRIG SYS # SRVNG AHU: CH-1	SERVES AREA: OFFICE AREA 2
	BLDG AREA HEATED: 0
AHU UNIT TYPE SINGLE ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: 0	<b>CFM-CLG</b> : 940
MIN %OA: 20	MAX %OA: 20
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP: 0.5	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: MARATHON	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: GC1921146	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: NONE	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 2	MONTH SCHEDULE NO: 2
	MONTH SCHEDULE NO: 2
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:	
DAY SCHEDULE NO: 2	: THUR: FRI: SAT:
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS: SUN: MON: TUE: WED	: THUR: FRI: SAT:
DAY SCHEDULE NO:         2           SCHEDULE COMMENTS:         WON:         TUE:         WED           PRES START:         0         0         0         0           PRES STOP:         24         24         24         24	: THUR: FRI: SAT:
DAY SCHEDULE NO:         2           SCHEDULE COMMENTS:         WON:         TUE:         WED           PRES START:         0         0         0         0           PRES STOP:         24         24         24         24	: THUR: FRI: SAT: 0 0 0 0 4 24 24 24 7 7 7 0
DAY SCHEDULE NO:         2           SCHEDULE COMMENTS:         WON:         TUE:         WED           PRES START:         0         0         0         0           PRES STOP:         24         24         24         24           REQ START:         0         7         7         7           REQ STOP:         0         17         17         17	: THUR: FRI: SAT: 0 0 0 0 0 4 24 24 24 7 7 7 0
DAY SCHEDULE NO: 2           SCHEDULE COMMENTS:         2           SUN: MON: TUE: WED           PRES START: 0 0 0 0 0         0           PRES STOP: 24 24 24 24         24 24 24           REQ START: 0 7 7 7         7           REQ STOP: 0 17 17 17         17           MONTHS JAN: FEB: MAR: APR: MAY: ON:	: THUR: FRI: SAT: 0 0 0 0 0 4 24 24 24 7 7 7 0 7 17 17 0  JUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: 2           SCHEDULE COMMENTS:         2           SUN: MON: TUE: WED           PRES START: 0 0 0 0 0           PRES STOP: 24 24 24 24 24           REQ START: 0 7 7 7           REQ STOP: 0 17 17 17           MONTHS JAN: FEB: MAR: APR: MAY: ON: 0	: THUR: FRI: SAT: 0 0 0 0 4 24 24 24 7 7 7 0 17 17 0
DAY SCHEDULE NO:   2	: THUR: FRI: SAT: 0 0 0 0 0 4 24 24 24 7 7 7 0 7 17 17 0  JUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: 2           SCHEDULE COMMENTS:         2           SUN: MON: TUE: WED           PRES START: 0 0 0 0 0           PRES STOP: 24 24 24 24 24           REQ START: 0 7 7 7           REQ STOP: 0 17 17 17           MONTHS JAN: FEB: MAR: APR: MAY: ON: 0	: THUR: FRI: SAT: 0 0 0 0 0 4 24 24 24 7 7 7 0 7 17 17 0   JUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:    SUN: MON: TUE: WED	: THUR: FRI: SAT:  0 0 0 0 4 24 24 24 7 7 7 0 7 17 17 0   JUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:    SUN: MON: TUE: WED	: THUR: FRI: SAT: 0 0 0 0 0 4 24 24 24 7 7 7 0 7 17 17 0   JUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:    SUN: MON: TUE: WED	: THUR: FRI: SAT: 0 0 0 0 0 4 24 24 24 7 7 7 0 17 17 0  JUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:    SUN: MON: TUE: WED	: THUR: FRI: SAT: 0 0 0 0 0 4 24 24 24 7 7 7 0 17 17 0  JUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:    SUN: MON: TUE: WED	: THUR: FRI: SAT:  0 0 0 0 4 24 24 24 7 7 7 0 17 17 17 0   JUN: JUL: AUG: SEP: OCT: NOV: DEC:
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:    SUN: MON: TUE: WED	: THUR: FRI: SAT:  0 0 0 0 0 4 24 24 24 7 7 7 0 7 17 17 0   JUN: JUL: AUG: SEP: OCT: NOV: DEC:  □ THERMOSTAT TYPE: SINGLE SETPOINT  HOT DECK DEG F: 0  COLD DECK DEG F: 0  MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP: 0  O OTHER SETPOINT DEG F: 0
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:    SUN: MON: TUE: WED	: THUR: FRI: SAT:  0 0 0 0 0  4 24 24 24  7 7 7 0  17 17 17 0   JUN: JUL: AUG: SEP: OCT: NOV: DEC:  □ THERMOSTAT TYPE: SINGLE SETPOINT  HOT DECK DEG F: 0  COLD DECK DEG F: 0  MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP: 0  O OTHER SETPOINT DEG F: 0  D OTHER SETPOINT DEG F: 0  O OTHER SETPOINT DEG F: 0  D OTHER SETPOINT DEG F: 0
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:    SUN: MON: TUE: WED	: THUR: FRI: SAT:  0 0 0 0 0 4 24 24 24 7 7 7 0 7 17 17 0   JUN: JUL: AUG: SEP: OCT: NOV: DEC:  □ THERMOSTAT TYPE: SINGLE SETPOINT  HOT DECK DEG F: 0  COLD DECK DEG F: 0  MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP: 0  O OTHER SETPOINT DEG F: 0  DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N  ER DB CONTROL: N TIME CLOCK: N
DAY SCHEDULE NO: 2 SCHEDULE COMMENTS:  SUN: MON: TUE: WED PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 REQ START: 0 7 7 REQ STOP: 0 17 17 17  MONTHS JAN: FEB: MAR: APR: MAY: ON:	: THUR: FRI: SAT:  0 0 0 0 0  4 24 24 24  7 7 7 0  17 17 17 0   JUN: JUL: AUG: SEP: OCT: NOV: DEC:  □ THERMOSTAT TYPE: SINGLE SETPOINT  HOT DECK DEG F: 0  COLD DECK DEG F: 0  MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP: 0  O OTHER SETPOINT DEG F: 0  DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N  ER DB CONTROL: N TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

**DATE**: 10/11/94 PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER	AND CORP. AS AND THE REST. TO		AHU LOCATION	I: STORAGE A	REA	
REFRIG SYS # SRVNG A	HU: CH-1		SERVES AREA:	OFFICE AREA	3	
		% OF BLD	AREA HEATED:			0
AHU UNIT TYPE SINGL	LE ZONE		NU	JMBER OF ZON	ES IF MZ UNI	T: 0
CFM-HTG:		0	CFM-CLG:		940	
MIN %OA:	-	20 .	MAX %OA:		20	
NAMEPLATE						
UNIT MFG:			UN	IT MODEL:	Towns where the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	
SUPPLY FAN HP:		5		H FAN HP:		0
SUPPLY FAN MTR MFG:	MARATHON		RET/EXH FAN			
SUPPLY FAN MTR MODEL: COMMENTS:	GC1921146		RET/EXH FAN MT	R MODEL:		
COMMENTS:	·			<u> </u>		
COILS						
Coil	Coil Ty	pe	Modulating	Valve?		
PREHEAT COIL:	NONE					
HEATING COIL:			📙			
REHEAT COIL:	-		님			
HUMIDIFIER: COOLING COIL:						
	CVV					
SCHEDULE						
DAY SCHEDULE NO:	2			MONTH SCH	EDULE NO:	2
DAY SCHEDULE NO: SCHEDULE COMMENTS:	2			MONTH SCH	EDULE NO:	2
	MON: TUE	: WED: TH	IUR: FRI:	MONTH SCH	EDULE NO:	2
SCHEDULE COMMENTS:  SUN: PRES START:  0	MON: TUE	0 0	0 0	SAT:	EDULE NO:	2
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24	MON: TUE 0 24 2	0 0 24	0 0 24	SAT: 0 24	EDULE NO:	2
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0	MON: TUE 0 24 2	0 4 24 7 7	0 0 24 24 7 7	SAT: 0 24 0	EDULE NO:	2
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24	MON: TUE 0 24 2	0 4 24 7	0 0 24	SAT: 0 24	EDULE NO:	2
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB:	MON: TUE 0 24 2	0 4 24 7 7	0 0 24 24 7 7	SAT: 0 24 0		2 EC:
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON: TUE 0 24 2 7 17 1	0 4 24 7 7 7 17	0 0 24 24 7 7 17 17	SAT: 0 24 0 0	NOV: DI	:
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE 0 24 2 7 17 1  MAR: APR:	0 4 24 7 7 7 17 MAY: JUN:	0 24 24 7 7 17 17 JUL: AUG:	SAT: 0 24 0 0 0 SEP: OCT:	NOV: DI	EC:
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 2 7 17 1  MAR: APR:	0 0 4 24 7 7 7 17 17 MAY: JUN:	0 0 24 7 7 17 17 17 JUL: AUG:   ☑ THERM	SAT:	NOV: DI	EC:
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 2 7 17 1  MAR: APR:	0 0 4 24 7 7 7 17 17 MAY: JUN:	0 0 24 24 7 7 17 17 17 17	SAT:  0 24 0 0 0 SEP: OCT:  IOSTAT TYPE: DECK DEG F:	NOV: DI	EC:
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 2 7 17 1  MAR: APR:  □ □  TROLS: PNEUI R OCC:	0 0 4 24 7 7 7 17 17 MAY: JUN:	0 0 24 24 7 7 17 17 17 17	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F:	NOV: DI	EC:  POINT  0 0
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 27 17 17 1  MAR: APR:  □ □  TROLS: PNEUI R OCC: NOCC:	0 0 4 24 7 7 7 17	0 0 24 24 7 7 17 17 JUL: AUG:  ☑ ☑  THERM HOT COLD MIXE	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: ED AIR DEG F:	NOV: DI	EC:
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 2 7 17 11  MAR: APR:  □ □ □  TROLS: PNEUI R OCC: NOCC:	0 0 4 24 7 7 7 7 17	0 0 24 24 7 7 17 17 17 17 JUL: AUG:  ☑ THERM HOT COLD MIXE OTHER SETPO	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: ED AIR DEG F:	NOV: DI	EC:  POINT  0 0
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 2 7 17 17 1  MAR: APR:  □ □  FROLS: PNEUI R OCC: NOCC: NOCC: NOCC:	0 0 4 24 7 7 7 7 17	O O O 24 24 7 7 7 17 17 17 17 17 17 17 17 17 17 17	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F:	NOV: DI	EC:  POINT  0 0 0 0
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 2 7 17 17 1  MAR: APR:  CROCS: PNEUI ROCC: NOCC: NO	0 0 4 24 7 7 7 7 17	O O O 24 24 7 7 7 17 17 17 17 17	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: ED AIR DEG F: POINT DEG F:	NOV: DI	FPOINT  0 0 0 0
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 2 7 17 17 1  MAR: APR:  CROCS: PNEUI ROCC: NOCC: NO	0 0 4 24 7 7 7 7 17	O O 24 24 7 7 7 17 17 17 17 17 17 IT IT IT IT IT IT IT IT IT IT IT IT IT	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: IMPLEMENT I	NOV: DI	EC:  O O O IT CNTRLS? N IME CLOCK: N
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 2 7 17 11  MAR: APR:  CROCS: PNEUI ROCC: NOCC:  MAY: JUN:  MAY: JUN:  MATIC  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O O 24 24 7 7 7 17 17 17 17 17 17 IT IT IT IT IT IT IT IT IT IT IT IT IT	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: IMPLEMENT I	NOV: DI	EC:  O O O IT CNTRLS? N IME CLOCK: N	
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: TUE  0 24 27 17 17 1  MAR: APR:  CROCS: PNEUI ROCC: NOCC: NOC	MAY: JUN:  MAY: JUN:  MATIC  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O O 24 24 7 7 7 17 17 17 17 17 17 IT IT IT IT IT IT IT IT IT IT IT IT IT	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: IMPLEMENT I	NOV: DI	EC:  O O O IT CNTRLS? N IME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

**DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBE	,		_			
			=			
AHU NUMBE	R: AHU-4		AHU LOCATIO	N: STORAGE A	AREA	
REFRIG SYS # SRVNG	AHU: CH-1		SERVES AREA:	OFFICE AREA	. 4	
		% OF	BLDG AREA HEATED:		0	
AHU UNIT TYPE SING	SLE ZONE		N	UMBER OF ZON	ES IF MZ UNIT: 0	
CFM-HTG	:	0	CFM-CLG:		940	
MIN %OA	:	20	MAX %OA:		20	
NAMEPLATE						
UNIT MFG	:		· UN	IIT MODEL:		
SUPPLY FAN HP		0.5		(H FAN HP:	0	
SUPPLY FAN MTR MFG	: MARATH	ON	RET/EXH FAN	MTR MFG:		
SUPPLY FAN MTR MODEL	: GC10211	46	RET/EXH FAN M	TR MODEL:		
COMMENTS	:					
COILS						
Coil	Co	il Type	Modulating	Valve?		
PREHEAT COIL	: NONE		. 🗆			
HEATING COIL	: NONE					
REHEAT COIL	: NONE					
HUMIDIFIER	,					
COOLING COIL	: CW					
SCHEDULE						
DAY SCHEDULE NO:	. 2			MONTH SCH	EDULE NO: 2	
DAY SCHEDULE NO: SCHEDULE COMMENTS:	2			MONTH SCH	EDULE NO: 2	
SCHEDULE COMMENTS:		TUE: WED	· THUR· FRI:		EDULE NO: 2	-
SCHEDULE COMMENTS:	MON:	TUE: WED	: THUR: FRI:	MONTH SCH	EDULE NO: 2	-
SCHEDULE COMMENTS:	MON:	0 (	0 0	SAT:	EDULE NO: 2	-
SCHEDULE COMMENTS:  SUN: PRES START:  0	MON:	0 0	0 0	SAT:	EDULE NO: 2	-
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24	MON: 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAT: 0 24	EDULE NO: 2	= .
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON: 0 24 7 17	0 0 24 24 7 17 11	0 0 0 4 24 24 7 7 7 7 7 17 17	SAT: 0 24 0 0		
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON:  0 24 7 17  MAR: AI	0 24 24 7 17 17 17 PR: MAY:	0 0 0 4 24 24 7 7 7 7 7 17 17	SAT: 0 24 0 0 SEP: OCT:	NOV: DEC:	-
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON: 0 24 7 17	0 24 24 7 17 17 17 PR: MAY:	0 0 0 4 24 24 7 7 7 7 7 17 17	SAT: 0 24 0 0		
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON:  0 24 7 17  MAR: AI	0 24 24 7 17 17 17 PR: MAY:	0 0 0 4 24 24 7 7 7 7 7 17 17	SAT: 0 24 0 0 SEP: OCT:	NOV: DEC:	
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON:  0 24 7 17  MAR: AI	0 24 24 7 17 17 17 PR: MAY:	0 0 0 4 24 24 7 7 7 7 7 17 17 17 JUN: JUL: AUG:  ☑ ☑ ☑ ☑ ☑ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	SAT:  0 24 0 0 0  SEP: OCT:	NOV: DEC:	
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON:  0 24 7 17  MAR: AI	0 24 24 7 17 17 17 17 PR: MAY:	0 0 0 4 24 24 7 7 7 7 7 7 17 17 17 17 JUN: JUL: AUG:  ☑ ☑ ☑ ☑ ☑ ☐ THERI HO	SAT:  0 24 0 0 0 SEP: OCT:  MOSTAT TYPE: T DECK DEG F:	NOV: DEC:	
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CON	MON:  0 24 7 17  MAR: AI  ITROLS: P	0 24 24 7 17 17 17 17 PR: MAY:	0 0 0 4 24 24 7 7 7 7 7 7 17 17 17 17 JUN: JUL: AUG:  ☑ ☑ ☑ ☑ ☑ ☐ THERI HO COLI	SAT:  0 24 0 0 0 SEP: OCT:	NOV: DEC:  SINGLE SETPOINT  0 0	
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON:  0 24 7 17  MAR: AI  ITROLS: P TR OCC: UNOCC:	0 24 24 7 17 17 17 17 PR: MAY:	0 0 0 0 4 24 24 7 7 7 7 7 7 7 17 17 17 17	SAT:  0 24 0 0 0 SEP: OCT:	NOV: DEC:	
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON:  0 24 7 17  MAR: AI  ITROLS: P TR OCC: UNOCC:	0 24 24 7 17 17 17 17 PR: MAY:	0 0 0 0 4 24 24 7 7 7 7 7 7 17 17 17 17 17 17 17 17 17	SAT:  0 24 0 0 0 SEP: OCT:	NOV: DEC:  SINGLE SETPOINT  0 0	
SCHEDULE COMMENTS:  SUN: PRES START:  PRES STOP:  REQ START:  REQ START:  OREQ STOP:  ON:  TYPE OF COMPRESENT TEMP WINT PRESENT TEMP WINT PRESENT TEMP SI	MON:  0 24 7 17  MAR: AI  ITROLS: P ITR OCC: UNOCC:	0 (24 7 17 17 17 17 17 17 17 17 17 17 17 17 1	0 0 0 0 4 24 24 7 7 7 7 7 7 17 17 17 17 17 17 17 17 17	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: CED AIR DEG F: OINT DESCRIP: FPOINT DEG F:	NOV: DEC:  SINGLE SETPOINT  0 0	
SCHEDULE COMMENTS:  SUN: PRES START:  PRES STOP:  REQ START:  REQ START:  OREQ STOP:  ON:  TYPE OF COM PRESENT TEMP WINT PRESENT TEMP SUM PRESENT TEMP SUM	MON:  0 24 7 17  MAR: AI  TROLS: P TROCC: UNOCC: UN	0 0 24 24 7 17 17 17 17 17 17 17 MAY:  MIXED AIR	0 0 0 0 4 24 24 7 7 7 7 7 7 7 7 17 17 17 17 17 17	SAT:  0 24 0 0 0 SEP: OCT:  DECK DEG F: DECK DEG F: CED AIR DEG F: OINT DESCRIP: FPOINT DEG F:	NOV: DEC:  SINGLE SETPOINT  0 0 0	LS? N
SCHEDULE COMMENTS:  SUN: PRES START:  PRES STOP:  REQ START:  REQ START:  OREQ STOP:  ON:  TYPE OF COM PRESENT TEMP WINT PRESENT TEMP SIM PRESENT TEMP SUM MIN OA DMPR CONTROL	MON:  0 24 7 17  MAR: AI  TROLS: P TR OCC: UNOCC: U	O 24 24 7 17 17 17 17 17 17 17 17 17 17 17 17 1	0 0 0 0 4 24 24 7 7 7 7 7 7 7 17 17 17 17 17 17 17 17 1	SAT:  0 24 0 0 0 SEP: OCT:  MOSTAT TYPE: T DECK DEG F: D DECK DEG F: CED AIR DEG F: OINT DESCRIP: TPOINT DEG F: IMPLEMENT	NOV: DEC:  SINGLE SETPOINT  0 0 0 0	LS? N
SCHEDULE COMMENTS:  SUN: PRES START:  PRES STOP:  REQ START:  REQ START:  OREQ STOP:  ON:  TYPE OF COM PRESENT TEMP WINT PRESENT TEMP WINT PRESENT TEMP SI PRESENT TEMP SUM MIN OA DMPR CONTRO MAX OA DMPR CONTRO	MON:  0 24 7 17  MAR: AI  ITROLS: P ITROCC: UNOCC:	O 24 24 7 17 17 17 17 17 17 17 17 17 17 17 17 1	0	SAT:  0 24 0 0 0 SEP: OCT:  MOSTAT TYPE: T DECK DEG F: D DECK DEG F: CED AIR DEG F: OINT DESCRIP: TPOINT DEG F: IMPLEMENT	NOV: DEC:  SINGLE SETPOINT  0 0 0 0 DEMAND LIMIT CNTR TIME CLC	LS? N
SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: ON:	MON:  0 24 7 17  MAR: AI  TROLS: P TROCC: UNOCC: UN	O 24 24 7 17 17 17 17 17 17 17 17 17 17 17 17 1	0	SAT:  0 24 0 0 0 SEP: OCT:  MOSTAT TYPE: T DECK DEG F: D DECK DEG F: CED AIR DEG F: OINT DESCRIP: TPOINT DEG F: IMPLEMENT	NOV: DEC:  SINGLE SETPOINT  0 0 0 0 DEMAND LIMIT CNTR TIME CLC	LS? N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER			
AHU NUMBER		AHU LOCATION: STORAGE AREA	
REFRIG SYS # SRVNG AI		SERVES AREA: OFFICE AREA 5	
		LDG AREA HEATED: 0	
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZONES IF MZ UNIT: 0	
CFM-HTG:	0	CFM-CLG: 940	
MIN %OA:	20	MAX %OA: 20	
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	0.5	RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	GC1921146	RET/EXH FAN MTR MODEL:	
COMMENTS:	·		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	2	MONTH SCHEDULE NO: 2	
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	7 7 7	7 7 0	
REQ STOP: 0	17 17 17	17 17 0	
	17 17 17	17. 17 0	
MONTHS JAN: FEB: ON:	17 17 17 17 MAR: APR: MAY: JUI	JN: JUL: AUG: SEP: OCT: NOV: DEC:	
MONTHS JAN: FEB:	17 17 17	JN: JUL: AUG: SEP: OCT: NOV: DEC:	
MONTHS JAN: FEB: ON:		JN: JUL: AUG: SEP: OCT: NOV: DEC:	
MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CONT	MAR: APR: MAY: JUI	17. 17 0  UN: JUL: AUG: SEP: OCT: NOV: DEC:  W W W D D D  THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0	
MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CONT	MAR: APR: MAY: JUI    I	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F:  COLD DECK DEG F:  0	
MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CONT  PRESENT TEMP WINTE U	MAR: APR: MAY: JUI  FROLS: PNEUMATIC  R OCC: 0  NOCC: 0	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F:  COLD DECK DEG F:  0	
MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CONT	MAR: APR: MAY: JUI  FROLS: PNEUMATIC  R OCC: 0  NOCC: 0	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: OCOLD DECK DEG F: OTHER SETPOINT DESCRIP:	
MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CONT  PRESENT TEMP WINTE  PRESENT TEMP WINTE U  PRESENT TEMP SUM U	17	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F:	
MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CONT  PRESENT TEMP WINTE  PRESENT TEMP WINTE U  PRESENT TEMP SUM U  PRESENT TEMP SUM U  MIN OA DMPR CONTROL	17	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F: O MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: O	_
MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CONT  PRESENT TEMP WINTE  PRESENT TEMP WINTE U  PRESENT TEMP SUM  PRESENT TEMP SUM U  MIN OA DMPR CONTROL  MAX OA DMPR CONTROL	MAR: APR: MAY: JUI  FROLS: PNEUMATIC  ROCC: 0  NOCC: 0  NOCC: 0  MIXED AIR DMR ECONOMIZER I	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: OCOLD DECK DEG F: OMIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: OTHER CONTROL:  IMPLEMENT DEMAND LIMIT CNTRLS? TIME CLOCK:	N
MONTHS JAN: FEB: ON:  CONTROLS  TYPE OF CONT  PRESENT TEMP WINTE  PRESENT TEMP WINTE U  PRESENT TEMP SUM U  PRESENT TEMP SUM U  MIN OA DMPR CONTROL	MAR: APR: MAY: JUI  FROLS: PNEUMATIC  R OCC: 0  NOCC: 0  NOCC: 0  MIXED AIR DMI ECONOMIZER I  ECONOMIZER I  ECONOMIZER I	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: OCOLD DECK DEG F: OMIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: OTHER CONTROL:  IMPLEMENT DEMAND LIMIT CNTRLS? TIME CLOCK:	N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER: 7602		BOILER RM LOC	ATION: MER			
BOILER UNIT						
	BLR/CONVERTER SEF	RVES AREA OR SERVICE:	SPACE HEAT			
SOURCE OF BLDG HEAT						
● BOILER		CONVERTER				
BOILER TAG: BLR-1		CONVERTER TAG:				
	JP TO 250 DEG)	CONVERTER TYPE:				
FUEL TYPE: NAT.	GAS :	CONV HT SOURCE:				
CENTRAL PLANT DIRE	ст					
NAMEPLATE	%	AREA HEATED BY BB RA	DIATION:	100		
BOILER MFG: OSAGE		BLR CAP OUTPUT (BT	UH):	800,000		
UNIT MODEL: 40-5-201		BLR CAP INPUT (BT	JH):	1,000,000		
COMMENTS:				· · · · · · · · · · · · · · · · · · ·		
SCHEDULE						
3CHEDULE						
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	2	MONT	H SECHDULE NO	: 1		
	NON: TUE: WED: T	HUR: FRI: SAT:				
PRES START: 0	0 0 0	0 0 0				
PRES STOP: 24	24 24 24	24 24 24				
REQ START: 0	7 7 7	7 7 0				
REQ STOP: 0	17 17 17	17 17 0				
MONTHS JAN: FEB: MA	AR: APR: MAY: JUN:	JUL: AUG: SEP:	OCT: NOV:	DEC:		
ON: 🖂 🖂 🗓				<u> </u>		
CONTROLS						
TYPE OF BLR CONTRO	OLS: PNEUMATIC	RES	ET CONTROLS: [	Y		
OPERATING SETPO	INT: 0 DEG F	or PSIG				
TYPE OF BURNER CONTRO	DLS:					
CONTROLS COMME	NTS:					

**PROJECT NAME:** EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO**: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW

# PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	7602				BLDG I	NAME:	ADMIN &	SUPPO	RT BLDG			
PER RAD	(SYSTE	M TAG) NO	: RAD	-1			RAD S	YS LOCA	TION:	PERIMET	ER OF E	LDG.	MATERIAL PROPERTY.
sot	JRCE OF	HEATING	3: BLR	-1			S	SERVES	AREA:	ALL			
RAD	IATION L	JNIT TYPI	E: HW					% AREA	HTG:		10	0	
RADIA	TION	PUM	Р										
PUMP 1	rag: 1			PUM	P HP:	0.	75	PUMP	MFG:	CENTUR'	Y		
								PUMP M	ODEL:	SC-18262	-KCA-6		
SCHED	ULE												
DA	YS SCHI	EDULE NO	o:	2		MO	NTHS SC	HEDULE	NO:		1		
SCHE	DULE C	OMMENTS	S:										
		SUN:	MON:	TUE:	WE	D: Th	IUR:	FRI:	SAT:				
PRES S	TART:	0	0			0	0	0	0				
PRES	STOP:	24	24	24		24	24	24	24				
REQ S	TART:	0	7	7		7	7	7	0				
REQ	STOP:	0	17	17		17	17	17	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$		$\boxtimes$	$\boxtimes$						$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTR	OLS												
TY	PE OF R	AD. CON	TROLS:				:						
	RADIA	TION CO	NTROL:	NONE									
	oc	C HT SPA	CE SP:	-	0								
	UNOC	C HT SPA	CE SP:	Print 10 10 10 10	0			R	ESET C	ONTROL:	N		
	CONTR	OL COM	MENTS:	3-WAY	PNEUN	MATIC C	ONTROL	VALVE	LOCATE	D IN MER			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/11/94

PREPARED BY: AJN/CWW

# REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7602 BLI	DG NAME: ADMIN & SUPPORT BLDG
REF. UNIT NUMBER/TAG: CH-1	LOCATION (MER#): OUTSIDE
	AHU'S SERVED: AHU-1, 2, 3, 4, & 5
UNIT TYPE RECIPROCATING	WITH AIR COOLED CONDENSING UNIT
NAMEPLATE	
CHILLER MFG: TSI	TOWER MFG: LARKIN
CHILLER MODEL: SC2C515	# OF TOWER FANS: 2
CHILLER SERIAL NO: 9129-1	TOWER FAN V: 208
CHILLER V: 230	TOWER FAN AMPS: 9.2
CHILLER AMPS: 62	TOWER FAN HP: 0.5
CHILLER PH: 3	
CHILLER CAP (TONS): 15	
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 2	MONTHS SCHEDULE NO: 2
SCHEDULE COMMENTS:	
SUN: MON: TUE: WE	D: THUR: FRI: SAT:
PRES START: 0 0 0	0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 7 7	7 7 0
REQ STOP: 0 17 17	17 17 0
MONTHS JAN: FEB: MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	,
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	
CWS SETPOINT:	0 CNWS SETPOINT: 0
CWS SETPOINT:	0 CNWR SETPOINT: 0
CWR SETFOINT.	U CHANGETPORT.
	P LITE HI: N OTHER INDICATIONS:
	LITE LOW: N
PRESS GAUGES: N TEMP	GAUGES: N
CONTROLS COMMENTS:	j
No.	
CW and CNW PUMPS  PUMP TAG: 1 PUMP HP:	1 PUMP MFG: CENTURY

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

COOKHON. 13. MEET, 10-			BLDG:	7602		FILE:	7602.XLS	
	AIR I	HANDLIN	G UNIT - HVAC	UPGRADE	OBSERVA [*]	TIONS		
AHU NO.:	AHU-1	LOCATIO	N (Rm) SUPF	PLY				
AHU TYPE:	SZ	MFG.:	•		MODEL:	-		
SZ - Single Zone		ating & Vntltng		Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	oe)	
MZ - Mulitzone		iable Air Vol.		- Reheat System				
DD - Dual Duct	UH - Unit	Heater	:IND -	Induction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	TYPICAL	OF 5					DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
							1	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:							<del> </del>	
				***************************************	·			
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
NLET VANES	N/A: X	OK:	COMMENTS:		rama mer			
RETURN AIR FAN	ок:	TREPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:								
								· · · · · · · · · · · · · · · · · · ·
						<del></del>		
COOLING COIL	N/A:	Юк: х	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:			1.00.0100	TOILL.	OTTEVE		RP-ACT = Replace	
OOMINE CO.							RP-BD = Replace I	
							RP-BD = Replace I	
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:		1	1	17:22,				
								····
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			
DUCT INSULATION	N/A:	OK:	MISSING:		ED QUANTITY:			<del></del>
COMMENTS:	1,017		TANIGOTIAG.	LOTIVIAT	LO QUANTITI.			
COMMENTS.								
			- Programme					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7602

FILE:

HILLER / EQUIP. NO. EFG. EQUIP. TYPE:	KEFKIGE	'D & T   ( ) N	COMPMENT U	VAC LIDCDADE ODSEDV	ATIONS
REFG. EQUIP. TYPE:				VAC UPGRADE OBSERV	ATIONS
		CH-1	LOCATION (RM)	MER	0.5.4.5
O MOT - O4-16		R-ACCU	MFG.: TSI		C515
C-WCT = Centrifugal w/ \				J = Reciprocating w/ Air Cooled Cond	
R-WCT = Reciprocating v		e Cooling Tov		CT = Absorption w/ Water Side Coolin	g lower
ACCU = Air Cooled Cond				poling Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
				Totac	
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:					
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A:	OK:	MISSING: X	ESTIMATED QUANTITY:	15'-2"
CHW PUMP MOTOR	N/A:	JOK: X	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
	N/A:	ОК:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	III. 10.7 € .				
	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR		OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS	N/A:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7602

FILE:

REFG. EQUIP. TYPE: ACCU MFG.: LARKIN MODEL: FCA16  -WCT = Centrifugal w/ Water Side Cooling Tower  -WCT = Reciprocating w/ Water Side Cooling Tower  -WCT = Reciprocating w/ Water Side Cooling Tower  CCU = Air Cooled Condensing Unit  CT = Cooling Tower  CCU = Air Cooled Condensing Unit  CT = Cooling Tower  CMP. MOTOR  N/A: OK: REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  T/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  T/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  COMMENTS:  COOLING TOWER  N/A: OK: MISSING: ESTIMATED QUANTITY:  COOLING TOWER  COOLING TOWER  N/A: X OK: MISSING: ESTIMATED QUANTITY:	HILLER / EQUIP. NO.		ACCU-1	LOCATION (RM)	OUTSIDE	
C-WCT = Centrifugal w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower ACCU = Reciprocating w/ Water Side Cooling Tower ACCU = Air Cooled Condensing Unit  CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT		···········				FCA16
ASB-WCT		Water Side C			i	
ACCU = Air Cooled Condensing Unit  COMP. MOTOR  N/A:  OK:  REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK:  REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK:  REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK:  REPLACE:  SIZE:  COMMENTS:  COOLING TOWER  N/A:  OK:  REPLACE:  SIZE:  COMMENTS:  COMMENTS:  CHILLER INSUL.  N/A:  N/A:  OK:  MISSING:  ESTIMATED QUANTITY:  CHW PUMP MOTOR  N/A:  X  OK:  REPLACE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  X  OK:  REPLACE:  SIZE:  SIZE:  SIZE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  X  OK:  REPLACE:  SIZE:   -		•				
COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         COMMENTS:         SIZE:         SIZE:           COOLING TOWER         N/A:         X         OK:         REPLACE:         SIZE:           COMMENTS:         COMMENTS:         SIZE:         SIZE:           CHILLER INSUL.         N/A:         X         OK:         MISSING:         ESTIMATED QUANTITY:           CHW PIPE INSUL.         N/A:         X         OK:         MISSING:         ESTIMATED QUANTITY:           COMMENTS:         CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         X			Ŭ		•	g
COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         COMMENTS:         SIZE:         SIZE:           COOLING TOWER         N/A:         X         OK:         REPLACE:         SIZE:           COMMENTS:         COMMENTS:         SIZE:         SIZE:           CHILLER INSUL.         N/A:         X         OK:         MISSING:         ESTIMATED QUANTITY:           CHW PIPE INSUL.         N/A:         X         OK:         MISSING:         ESTIMATED QUANTITY:           COMMENTS:         CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:	COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         COMMENTS:         SIZE:         SIZE:           COOLING TOWER         N/A:         X         OK:         REPLACE:         SIZE:           AIR COOLED COND.         N/A:         OK:         X         REPLACE:         SIZE:           COMMENTS:         CHILLER INSUL.         N/A:         X         OK:         MISSING:         ESTIMATED QUANTITY:           CHW PIPE INSUL.         N/A:         X         OK:         MISSING:         ESTIMATED QUANTITY:           COMMENTS:         CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         X         OK:         REPLACE:	COMP. MOTOR	N/A:	ок:	REPLACE:	SIZE:	
CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  COMMENTS:  COOLING TOWER  N/A: X OK: REPLACE: SIZE:  COOLING TOWER  N/A: X OK: REPLACE: SIZE:  AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:	COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  COMMENTS:  COMMENTS:  COOLING TOWER  N/A: X OK: REPLACE: SIZE:  AIR COOLED COND. N/A: OK: REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:  COOLING TOWER N/A: X OK: REPLACE: SIZE:  AIR COOLED COND. N/A: OK: REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COOLING TOWER N/A: X OK: REPLACE: SIZE:  AIR COOLED COND. N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	CT/ACCU FAN MTR	N/A:	ОК:	REPLACE:	SIZE:	
AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:	COMMENTS:					
AIR COOLED COND.  N/A:  OK: X REPLACE:  SIZE:  COMMENTS:  CHILLER INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:	COOLING TOWER	∏N/Δ· ¥	IOK:	IDEDLACE:	TC17E	
CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:						
CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:		JIV/A.	JON. A	IREPLACE:	JOIZE:	
CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	COMMENTS:					
CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: X OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:						
CHW PUMP MOTOR	CHILLERINGUI	NI/A· Y	IOK:	IMICCINIC:		
CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:						
CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:	CHW PIPE INSUL.					
CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:	CHW PIPE INSUL.					
CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:	CHW PIPE INSUL.					
CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	CHW PIPE INSUL. COMMENTS:	N/A: X	ОК:	MISSING:	ESTIMATED QUANTITY	
CHW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY  SIZE:	
CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	MISSING:  REPLACE: REPLACE:	ESTIMATED QUANTITY  SIZE:  SIZE:	
	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
OTHER OFFICE PROPERTY OF THE P	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: X  N/A: X  N/A: X  N/A: X  N/A: X  N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
CHW BLIMP MOTOR INVALY TOW. I BEDLACE: ICITE.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL.  COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL.  COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS.	CHW PIPE INSUL.  COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMINICAL.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CONVICENTS.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COWWENTS.	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY: 760

7602.XLS

STM - Steam STM/HW - Steam to Hot Water Conv. HTH HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW BOILER BURNER ATMOSPHERIC: POWER: OK:  COMMENTS:  BLR PUMP MOTOR N/A: X OK: X REPLACE: SIZE BLR PUMP SEALS N/A: X OK: X REPLACE: SIZE COMMENTS:  BLR INSULATION N/A: OK: X MISSING: EST	MODEL: 40-5-201   MODEL:   W/STM - High Temp HW to Steam Convertor   / - Domestic Hot Water Convertor     REPLACE:
CONVERTER TYPE:  STM - Steam  STM/HW - Steam to Hot Water Conv.  HTH HW - Hot Water  HTHW/HW - High Temp. HW to HW Cv.  DHW BOILER BURNER  ATMOSPHERIC:  POWER:  OK:  COMMENTS:  BLR PUMP MOTOR  BLR PUMP SEALS  N/A: X OK: X REPLACE:  SIZE COMMENTS:  BLR INSULATION  N/A: OK: X MISSING:  EST  COMMENTS:  BLR INSULATION  N/A: OK: X MISSING:  EST  COMMENTS:  ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR  HW PUMP MOTOR  N/A: OK: REPLACE:  SIZE	MODEL: W/STM - High Temp HW to Steam Convertor / - Domestic Hot Water Convertor   REPLACE:
STM - Steam STM/HW - Steam to Hot Water Conv. HTH HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW BOILER BURNER ATMOSPHERIC: POWER: OK:  COMMENTS:  BLR PUMP MOTOR N/A: X OK: X REPLACE: SIZE BLR PUMP SEALS N/A: X OK: X REPLACE: SIZE COMMENTS:  BLR INSULATION N/A: OK: X MISSING: ESTIONMENTS:  BLR INSULATION N/A: OK: X MISSING: ESTIONMENTS: ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE	W/STM - High Temp HW to Steam Convertor  / - Domestic Hot Water Convertor    REPLACE:
HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW BOILER BURNER ATMOSPHERIC: POWER: OK:  COMMENTS:  BLR PUMP MOTOR N/A: X OK: X REPLACE: SIZE BLR PUMP SEALS N/A: X OK: X REPLACE: SIZE COMMENTS:  BLR INSULATION N/A: OK: X MISSING: ESTI COMMENTS: ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE	IMATED QUANTITY:  IMATED QUANTITY:  IMATED QUANTITY:  IMATED QUANTITY:  IMATED QUANTITY:  IMATED QUANTITY:
BOILER BURNER ATMOSPHERIC: POWER: OK:  COMMENTS:  BLR PUMP MOTOR N/A: X OK: X REPLACE: SIZE BLR PUMP SEALS N/A: X OK: X REPLACE: SIZE  COMMENTS:  BLR INSULATION N/A: OK: X MISSING: EST  PIPE INSULATION N/A: OK: X MISSING: EST  COMMENTS: ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR N/A: OK: REPLACE: SIZE  HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE  HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE	IREPLACE:  :: :: :: :: :: :: :: :: :: :: :: ::
BLR PUMP MOTOR   N/A: X   OK: X   REPLACE:   SIZE   BLR PUMP SEALS   N/A: X   OK: X   REPLACE:   SIZE   COMMENTS:  BLR INSULATION   N/A:   OK: X   MISSING:   EST   PIPE INSULATION   N/A:   OK: X   MISSING:   EST   COMMENTS:   ASBESTOS ON FLUE & ELBOWS    HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE   HW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE	IMATED QUANTITY: IMATED QUANTITY: IMATED QUANTITY: :: 3/4 HP CENTURY
BLR PUMP MOTOR   N/A: X   OK: X   REPLACE:   SIZE   BLR PUMP SEALS   N/A: X   OK: X   REPLACE:   SIZE   COMMENTS:   SIZE   COMMENTS:   SIZE   BLR INSULATION   N/A:   OK: X   MISSING:   EST   PIPE INSULATION   N/A:   OK: X   MISSING:   EST   COMMENTS:   ASBESTOS ON FLUE & ELBOWS    HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE	IMATED QUANTITY: IMATED QUANTITY:  :: 3/4 HP CENTURY ::
BLR PUMP SEALS  N/A: X  OK: X  REPLACE:  SIZE  COMMENTS:  BLR INSULATION  N/A:  OK: X  MISSING:  EST  PIPE INSULATION  N/A:  OK: X  MISSING:  EST  COMMENTS:  ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE  HW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE	IMATED QUANTITY: IMATED QUANTITY:  :: 3/4 HP CENTURY ::
BLR PUMP SEALS  N/A: X  OK: X  REPLACE:  SIZE  COMMENTS:  BLR INSULATION  N/A:  OK: X  MISSING:  EST  PIPE INSULATION  N/A:  OK: X  MISSING:  EST  COMMENTS:  ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE  HW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE	IMATED QUANTITY: IMATED QUANTITY:  :: 3/4 HP CENTURY ::
BLR PUMP SEALS  N/A: X  OK: X  REPLACE:  SIZE  COMMENTS:  BLR INSULATION  N/A:  OK: X  MISSING:  EST  PIPE INSULATION  N/A:  OK: X  MISSING:  EST  COMMENTS:  ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  HW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE  HW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE  SIZE  HW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE	IMATED QUANTITY: IMATED QUANTITY:  :: 3/4 HP CENTURY ::
BLR INSULATION   N/A:   OK: X   MISSING:   ESTING   PIPE INSULATION   N/A:   OK: X   MISSING:   ESTING   PIPE INSULATION   N/A:   OK: X   MISSING:   ESTING   COMMENTS:   ASBESTOS ON FLUE & ELBOWS    HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE   HW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE	IMATED QUANTITY: IMATED QUANTITY:  :: 3/4 HP CENTURY ::
BLR INSULATION   N/A:   OK: X   MISSING:   ESTIPE INSULATION   N/A:   OK: X   MISSING:   ESTIPE INSULATION   N/A:   OK: X   MISSING:   ESTIPE INSULATION   N/A:   OK: X   MISSING:   ESTIPE INSULATION   ESTIP	MATED QUANTITY:  : 3/4 HP CENTURY :
PIPE INSULATION N/A: OK: X MISSING: EST.  COMMENTS: ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE	MATED QUANTITY:  : 3/4 HP CENTURY :
PIPE INSULATION N/A: OK: X MISSING: EST.  COMMENTS: ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE	MATED QUANTITY:  : 3/4 HP CENTURY :
PIPE INSULATION N/A: OK: X MISSING: EST.  COMMENTS: ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE	MATED QUANTITY:  : 3/4 HP CENTURY :
ASBESTOS ON FLUE & ELBOWS  HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP SEALS N/A: OK: REPLACE: SIZE HW PUMP MOTOR N/A: OK: REPLACE: SIZE	: 3/4 HP CENTURY :
HW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE           HW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE           HW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE           HW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE           HW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE	
HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE  HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE	
HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE  HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE	
HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE  HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE	
HW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE           HW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE           HW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE	
HW PUMP SEALS N/A: OK: REPLACE: SIZE  HW PUMP MOTOR N/A: OK: REPLACE: SIZE	·
HW PUMP MOTOR N/A: OK: REPLACE: SIZE	
HW PUMP SEALS   N/A:  OK:  REPLACE:  SIZE	
HW PUMP MOTOR N/A: OK: REPLACE: SIZE	
HW PUMP SEALS N/A: OK: REPLACE: SIZE	:
COMMENTS: PUMP UNINSULATED	
CV PUMP MOTOR N/A: X OK: REPLACE: SIZE	
CV PUMP SEALS N/A: X OK: REPLACE: SIZE	
	- Alberta
COMMENTS:	
L  CV INSULATION   N/A: X   OK:   MISSING:   EST	IMATED QUANTITY:
	IMATED QUANTITY:
COMMENTS:	

7602

BLDG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7608 BLDG NAME: ADMIN & SUPPORT BLDG

ELECTRIC METER: N

GAS METER: N
SUSPECT ACM: Y

CONDITIONED SQFT: 13,520

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 4

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	6	6	6	6	6	0
REQ STOP:	0	17	17	17	17	17	0

#### **REMARKS:**

Suspect ACM is located on pipe fittings and boiler.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

**CONTROLS COMMENTS:** 

**DATE**: 10/11/94 PREPARED BY: AJN/CWW

7 (11 ( 1 17	THE CITT	<u> </u>						
BUILDING NUMBER								
AHU NUMBER	R: AHU-1	AHU LOCATION: STORAGE ROOM						
REFRIG SYS # SRVNG AF		SERVES AREA: OFFICE AREA 1  BLDG AREA HEATED: 0						
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZONES IF MZ UNIT: 0						
CFM-HTG:	0	CFM-CLG: 940						
MIN %OA:	20	MAX %OA: 20						
NAMEPLATE								
UNIT MFG:		UNIT MODEL:						
SUPPLY FAN HP:	0.5	RET/EXH FAN HP: 0						
SUPPLY FAN MTR MFG:	GENERAL ELECT	RET/EXH FAN MTR MFG:						
SUPPLY FAN MTR MODEL: COMMENTS:	5K42HG2571	RET/EXH FAN MTR MODEL:						
COILS								
Coil	Coil Type	Modulating Valve?						
PREHEAT COIL:	NONE	. 🗖						
HEATING COIL:	NONE							
REHEAT COIL:	NONE							
	NONE							
COOLING COIL:	CW							
SCHEDULE								
DAY SCHEDULE NO: SCHEDULE COMMENTS:	4	MONTH SCHEDULE NO: 2						
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON:         TUE:         WED:           0         0         0           24         24         24           6         6         6           17         17         17	0 0 0 24 24 24 6 6 0						
MONTHS JAN: FEB:	MAR: APR: MAY: J	JUN: JUL: AUG: SEP: OCT: NOV: DEC:						
ON:								
CONTROLS								
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT						
PRESENT TEMP WINTE	R OCC:	0 HOT DECK DEG F: 0						
	<u> </u>	COLD DECK DEG F: 0						
PRESENT TEMP WINTR U	NOCC:	MIXED AIR DEG E:						
		MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP:						
PRESENT TEMP WINTR U	M OCC:	MIXED AIR DEG F: 0						
PRESENT TEMP WINTR U	NOCC:	MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP:						
PRESENT TEMP WINTR UI PRESENT TEMP SUM UI PRESENT TEMP SUM UI	M OCC: NOCC: MIXED AIR D	MIXED AIR DEG F: 0   0   0   OTHER SETPOINT DESCRIP: 0   0   0   OTHER SETPOINT DEG F: 0   0   0   0   0   0   0   0   0   0						
PRESENT TEMP WINTR UI PRESENT TEMP SUM PRESENT TEMP SUM UI MIN OA DMPR CONTROL	M OCC: NOCC:  NOCC:  MIXED AIR D  N ECONOMIZE	MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP: 0  O OTHER SETPOINT DEG F: 0  OMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?						
PRESENT TEMP WINTR UI PRESENT TEMP SUM PRESENT TEMP SUM UI MIN OA DMPR CONTROL MAX OA DMPR CONTROL	M OCC: NOCC:  IN MIXED AIR D IN ECONOMIZE IN ECONOMIZE	MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP: 0  O OTHER SETPOINT DEG F: 0  OMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? TIME CLOCK: 0						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

	<del></del>	<del></del>		
BUILDING NUMBER		AURI OCATION. ST	ODACE BOOM	7
AHU NUMBER	. Anu-2	AHU LOCATION: ST		-
REFRIG SYS # SRVNG AH			ICE AREA 2	
	% OF BLL	OG AREA HEATED:	0	
AHU UNIT TYPE SINGL	E ZONE	NUMBE	R OF ZONES IF MZ UNIT:	0
CFM-HTG:	0	CFM-CLG:	940	
MIN %OA:	20	MAX %OA:	20	
NAMEPLATE				
UNIT MFG:		UNIT MO	DEL:	_
SUPPLY FAN HP:	0.5	RET/EXH FAN	I HP: 0	
SUPPLY FAN MTR MFG:	GENERAL ELECT	RET/EXH FAN MTR !	MFG:	
SUPPLY FAN MTR MODEL:	5K42HG2571	RET/EXH FAN MTR MO	DEL:	
COMMENTS:				
COILS				
Coil	Coil Type	Modulating Valve	?	
PREHEAT COIL:	NONE			
HEATING COIL:	NONE			
REHEAT COIL:		📙		
HUMIDIFIER:		<b></b>		
COOLING COIL:	CW			
SCHEDULE				
DAY SCHEDULE NO:	4	MO	NTH SCHEDULE NO:	2
SCHEDULE COMMENTS:				
SUN:	MON: TUE: WED: T	THUR: FRI: SAT:		<u> </u>
PRES START: 0	0 0 0	0 0 0		
PRES STOP: 24	24 24 24	24 24 24		
REQ START: 0	6 6 6	6 6 0		
REQ STOP:0	<u>17</u> <u>17</u> <u>17</u>	17 17 0		
	MAR: APR: MAY: JUN	: JUL: AUG: SEP	: OCT: NOV: DEC:	:
ON:				:
CONTROLS				
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTA		Г
PRESENT TEMP WINTE	R OCC: 0	HOT DECH		≒
PRESENT TEMP WINTR UI	NOCC: 0	COLD DECI		) 
PRESENT TEMP SUN	MOCC: 0	OTHER SETPOINT D		=
PRESENT TEMP SUM UI		OTHER SETPOINT		<u></u>
MIN OA DMPR CONTROL		R CONTROL: N IMP	LEMENT DEMAND LIMIT CN	TRLS? N
MIN OA DMPR CONTROL MAX OA DMPR CONTROL	.: N MIXED AIR DMP		LEMENT DEMAND LIMIT CN TIME CI	
	.: N MIXED AIR DMP .: N ECONOMIZER D	B CONTROL: N		LOCK: N
MAX OA DMPR CONTROL	.: N MIXED AIR DMP .: N ECONOMIZER D .: N ECONOMIZER W	B CONTROL: N	TIME C	LOCK: N
MAX OA DMPR CONTROL RET AIR DMPR CONTROL	MIXED AIR DMP  BECONOMIZER D  CONOMIZER W  MIXED AIR DMP	B CONTROL: N	TIME C	LOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/11/94 PREPARED BY: AJN/CWW

7 (11 ( 1 1)	MIDEINIO CIMITOO	TRIET OBOLITIONS	
BUILDING NUMBER	7608		_
AHU NUMBER	: AHU-3	AHU LOCATION: STORAGE ROOM	-
REFRIG SYS # SRVNG AH	U:	SERVES AREA: OFFICE AREA 3	
	% OF BLDG	G AREA HEATED: 0	
AHU UNIT TYPE SINGLE	E ZONE	NUMBER OF ZONES IF MZ UNIT:	0
CFM-HTG:	0	CFM-CLG: 940	<u></u>
MIN %OA:	20	MAX %OA: 20	
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	0.5	RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG:	GENERAL ELECT	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	ATTENDED TO A STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STAT	RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE	— П	
HEATING COIL:		<b>_</b>	
	NONE		
	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	4	MONTH SCHEDULE NO:	2
SCHEDULE COMMENTS:		MONTH GOTTEDGE NO.	
SUN:		IUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	6 6 6	6 0	
REQ STOP: 0	17 17 17	17 0	
MONTHS JAN: FEB: N	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV: DEC:	_
ON:			
CONTROLS			i
TYPE OF CONTR	ROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT	
PRESENT TEMP WINTR	OCC: 0	HOT DECK DEG F: 0	
PRESENT TEMP WINTR UN		COLD DECK DEG F: 0	ŧ.
PRESENT TEMP SUM	OCC: 0	MIXED AIR DEG F: 0 OTHER SETPOINT DESCRIP:	: :
PRESENT TEMP SUM UN		OTHER SETPOINT DESCRIP:	
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: N IMPLEMENT DEMAND LIMIT CNT	RLS? N
MAX OA DMPR CONTROL:			
RET AIR DMPR CONTROL:		<del> </del>	
EXH AIR DMPR CONTROL:		TIME GLOOK OPERATIO	MURI M
OTHER CONTROLS DE	ESCR:		
CONTROLS COMMI	ENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

CA 04 04 D 0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

PREPARED BY: AJN/CWW

DATE: 10/11/94

BUILDING NUMBER	R: 7608		
AHU NUMBER	R: AHU-4	AHU LOCATION: STORAG	GE ROOM
REFRIG SYS # SRVNG A	4U:	SERVES AREA: OFFICE A	REA 4
	% OF BL	DG AREA HEATED:	0
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF	ZONES IF MZ UNIT: 0
CFM-HTG:	0	CFM-CLG:	940
MIN %OA:	20	MAX %OA:	20
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	0.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	GENERAL ELECT	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	5K42HG2571	RET/EXH FAN MTR MODEL:	
COMMENTS:			!
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	4	MONTH	SCHEDULE NO: 2
SCHEDULE COMMENTS:			
SUN:		THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	•
PRES STOP: 24	$\frac{24}{2} = \frac{24}{2} $	24 24 24	
REQ START: 0	$\frac{6}{17} = \frac{6}{17} = \frac{6}{17}$	$\frac{6}{17}$ $\frac{6}{17}$ $\frac{0}{0}$	
REQ STOP: 0	17 17 17	17 17 0	:
MONTHS JAN: FEB:	MAR: APR: MAY: JU!	N: JUL: AUG: SEP: C	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	rols: PNEUMATIC	THERMOSTAT TY	PE: SINGLE SETPOINT
PRESENT TEMP WINTI	R OCC: 0	HOT DECK DEC	G F: 0
PRESENT TEMP WINTR U		COLD DECK DEC	
PRESENT TEMP SUI	M OCC: 0	OTHER SETPOINT DESCI	
PRESENT TEMP SUM U		OTHER SETPOINT DEG	
MIN OA DMPR CONTROI	L: N MIXED AIR DM	PR CONTROL: N IMPLEM	ENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL			TIME CLOCK: N
RET AIR DMPR CONTROL	<del></del>	NB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL			-
OTHER CONTROLS	DESCR:		
CONTROLS COME	MENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE:** 10/11/94

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

AllX III	ANDEING UNIT	SOILAT ODG	DERVATIONS
BUILDING NUMBER	R: 7608		
AHU NUMBER	R: AHU-5	AHU LOCATION	: STORAGE ROOM
REFRIG SYS # SRVNG AI	HU:	SERVES AREA:	OFFICE AREA 5
	% OF	BLDG AREA HEATED:	0
AHU UNIT TYPE SINGL	E ZONE	NU	MBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	0	CFM-CLG:	940
MIN %OA:	20	MAX %OA:	20
NAMEPLATE			<u> </u>
UNIT MFG:		UNI	T MODEL:
SUPPLY FAN HP:	0.5		FAN HP: 0
SUPPLY FAN MTR MFG:	GENERAL ELECT	RET/EXH FAN	
SUPPLY FAN MTR MODEL:	5K42HG2571	RET/EXH FAN MTF	R MODEL:
COMMENTS:			
COILS			
Coil	Coil Type	Modulating \	Valve?
PREHEAT COIL:	NONE	— п	
HEATING COIL:	NONE	H	
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE	<u> </u>	
COOLING COIL:			
SCHEDULE			
DAY SCHEDULE NO:	4		MONTH SCHEDULE NO: 2
SCHEDULE COMMENTS:	work manufacture desirates at the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second sec		
SUN:	MON: TUE: WED	: THUR: FRI: S	SAT:
PRES START: 0	0 0 0		0
PRES STOP: 24	24 24 24		24
REQ START: 0	6 6 6		0
REQ STOP: 0	17 17 17		0
MONTHS JAN: FEB: ON:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC	THERMO	OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC:	0	DECK DEG F: 0
PRESENT TEMP WINTR U		COLD	DECK DEG F: 0
DDECENT TEND OU	1000		D AIR DEG F: 0
PRESENT TEMP SUM U		0 OTHER SETPOI 0 OTHER SETP	
MIN OA DMPR CONTROL	.: N MIXED AIR I	OMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL		R DB CONTROL: N	TIME CLOCK:
RET AIR DMPR CONTROL		R WB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL		RAID CONTROL. 14	THIL GLOON OF ENATIONAL?
OTHER CONTROLS D	ESCR:		
CONTROLS COMM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94
PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER	7608	<u> </u>		BOILER	RM LOCA	ATION:	MER			
OILER UNIT										
COURCE OF BURG		.R/CONVERTE	R SERVES AR	EA OR SE	RVICE:	PERIME	TER RAI	DIATION		
SOURCE OF BLDG I	1EA1									
■ BOILER			CONVERTER							
BOILER TAG			<del></del>	NVERTER	=				- ; <del>-</del> ,	
BOILER TYPE		DEG)	CONVERTER TYPE:							
FUEL TYPE	NAT. GAS		CON	IV HT SOL	JRCE:					
CENTRAL PLAN	T DIRECT								:	
IAMEPLATE			% AREA H	EATED B	/ BB RAI	DIATION:			100	
BOILER MFG: OSAGE			BLR	AP OUTF	UT (BTU	H):		800,000		
UNIT MODEL: 40-5-20				CAP INF				1,000,000		
COMMENTS										
COMMENTS:								:		
CHEDULE										
DAYS SCHEDULE NO: SCHEDULE COMMENTS:					MONTH	SECHD	ULE NO:		1	
SU		TUE: WED		FRI:	SAT:					
PRES START:	0 = 0 =		0 0	0	0					
	$\frac{24}{6} = \frac{24}{6} =$	24 24	= =====================================	24	24				:	
REQ START:	$\frac{0}{0} = \frac{6}{17} =$	6 6 17 1	6 7 17	<u>6</u>	0					
REQ STOP:	0 17		<u> </u>							
MONTHS JAN: FEE	B: MAR: A	PR: MAY:	JUN: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-	
ON: ⊠ ☑		3 🗆							!	
CONTROLS										
TYPE OF BLR (	ONTROLS: P	NEUMATIC			RESE	T CONTR	ols: [	N		
OPERATING	-		DEG F or PSIG	;			· L			
TYPE OF BURNER O	<u></u>									
CONTROL O	OMMENTO									
CONTROLS C	OMMEN 19:								1	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94
PREPARED BY: AJN/CWW

# PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	7608			:	BLDG I	NAME:	ADMIN 8	SUPPO	RT BLDG			
PER RAD	(SYSTEN	/I TAG) NO	: RAD	-1		•	RAD S	YS LOCA	TION:	PERIMET	ER OF B	LDG	CANCEL SECTOR
SOL	JRCE OF	HEATING	: BLR	-1			S	ERVES A	AREA:	ALL			
RAD	IATION L	JNIT TYPI	E: HW					% AREA	HTG:		100	<u></u>	
RADIA	TION	PUM	Р										
PUMP 1	ΓAG: <u>1</u>			PUN	IP HP:		0.5	PUMP	MFG:	RELIANC	E		
								PUMP M	ODEL:	Y214669A	<b>\</b> 5		
SCHED	ULE												
DA	YS SCH	EDULE NO	D:	4	4	MO	NTHS SC	HEDULE	NO:		1		
SCHE	DULE C	OMMENT	S:										
		SUN:	MON:	TUE	: WE	D: Th	HUR:	FRI:	SAT:				:
PRES S	TART:	0	0		<u> </u>	<u> </u>	<u> </u>	0	0				
PRES	STOP:	24	24	24	4	24	24	24	24				
REQ S		0	6		5	6	6	6	0				
REQ	STOP:	0	17	1	7	<u> 17</u>	17	17	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$						$\boxtimes$	$\times$	$\boxtimes$	
CONTR	ROLS												
TY	PE OF R	AD. CON	TROLS:										
	RADIA	TION COI	NTROL:	NONE									
	oc	C HT SPA	CE SP:		0								
		C HT SPA			0			F	RESET C	ONTROL:	N		
	CONTR	OL COM	MENTS:	3-WAY	PNEUM	MATIC C	ONTROL	. VALVE	LOCATE	D IN MER			_

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94
PREPARED BY: AJN/CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7608	BLDG NAM	IE: ADMIN & SUPPORT	BLDG
REF. UNIT NUMBER/TAG: CH-1		LOCATION (M	ER#): OUTSIDE
		AHU'S SEF	RVED: AHU-1, 2, 3, 4, & 5
UNIT TYPE	RECIPROCATING WITH A	IR COOLED CONDENSIN	G UNIT
NAMEPLATE			
CHILLER MFG: TSI		TOWER MFG:	LARKIN
CHILLER MODEL: SC2CS	5	# OF TOWER FANS:	2
CHILLER SERIAL NO:		TOWER FAN V:	208
CHILLER V:	0	TOWER FAN AMPS:	9.2
CHILLER AMPS:	0	TOWER FAN HP:	0.5
CHILLER PH:	0		
CHILLER CAP (TONS):	15		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE NO:	4	MONTHS SCHEDU	_E NO: 2
SCHEDULE COMMENTS:			
SUN: MO	N: TUE: WED: TH	HUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
	0 0 0 24 24 24	24 24 24	
	24 24 24 6 6 6 6	24     24     24       6     6     0	
PRES STOP: 24 REQ START: 0	24 24 24	24 24 24	
PRES STOP: 24 REQ START: 0 REQ STOP: 0	24     24     24       6     6     6       17     17     17	24     24     24       6     6     0       17     17     0	OCT: NOV: DEC:
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR	24 24 24 6 6 6 7 17 17 17 APR: MAY: JUN:	24     24     24       6     6     0       17     17     0    JUL: AUG: SEP:	OCT: NOV: DEC:
PRES STOP: 24  REQ START: 0  REQ STOP: 0  MONTHS JAN: FEB: MAR	24     24     24       6     6     6       17     17     17	24     24     24       6     6     0       17     17     0	OCT: NOV: DEC:
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:	24 24 24 6 6 6 7 17 17 17 APR: MAY: JUN:	24     24     24       6     6     0       17     17     0    JUL: AUG: SEP:	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:   CONTROLS	24 24 24 6 6 6 7 17 17 17 APR: MAY: JUN:	24     24     24       6     6     0       17     17     0    JUL: AUG: SEP:	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:   CONTROLS	24 24 24 6 6 6 7 17 17 17 APR: MAY: JUN:	24     24     24       6     6     0       17     17     0    JUL: AUG: SEP:	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:   CONTROLS	24 24 24 6 6 6 7 17 17 17 APR: MAY: JUN:	24     24     24       6     6     0       17     17     0    JUL: AUG: SEP:	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:   CONTROLS  TYPE OF CONTROLS:	24 24 24 6 6 6 7 17 17 17 17	24     24     24       6     6     0       17     17     0    JUL: AUG: SEP:	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:	24 24 24 6 6 6 6 7 17 17 17 17	24 24 24 6 6 0 17 17 0  JUL: AUG: SEP:	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:   CONTROLS  TYPE OF CONTROLS: CWS SETPOINT: CWR SETPOINT: PRESS LITE HI:	24 24 24 6 6 6 7 17 17 17 17 APR: MAY: JUN:	24 24 24 6 6 6 0 17 17 0  JUL: AUG: SEP:	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:	24 24 24 6 6 6 7 17 17 17 17 APR: MAY: JUN:	24 24 24 6 6 6 0 17 17 0	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:	24 24 24 6 6 6 6 7 17 17  APR: MAY: JUN:	24 24 24 6 6 6 0 17 17 0	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:	24 24 24 66 6 6 7 17 17 17 17 17 17 17 17 17 17 17 17 1	24 24 24 6 6 6 0 17 17 0	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:	24 24 24 66 6 6 7 17 17 17 17 17 17 17 17 17 17 17 17 1	24 24 24 6 6 6 0 17 17 0	
PRES STOP: 24 REQ START: 0 REQ STOP: 0  MONTHS JAN: FEB: MAR ON:	24 24 24 66 6 6 7 17 17 17 17 17 17 17 17 17 17 17 17 1	24 24 24 6 6 6 0 17 17 0	O O O O O O O O O O O O O O O O O O O

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN

CHECKED BY:

AJN

			BLDG:	7608		FILE:	7608.XLS	
	AIR I	HANDLIN	G UNIT - HVAC	UPGRADE (	OBSERVA	TIONS		
AHU NO.:	AHU-1	LOCATIO	N (Rm) STO	RAGE AREA				
AHU TYPE:	SZ	MFG.:			MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltng	, FC -	Fan Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT	- Reheat System				
DD - Dual Duct	·UH - Unit I	Heater	IND -	Induction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	·
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	PERIMET	ER RADIATIO	ON IN STORAGE ARE	A AND OFFICE AF	REA.		DPR-ACT = Dampe	r Actuator
	5 AHU'S S	SERVE OFFIC	E AREAS - COOLING	ONLY.			RP-ACT = Replace	
FILTER SECTION	161/A :	TOK: V	IDEDI ACE	IOIZE.				
	N/A:	OK: X	REPLACE:	SIZE:			<del></del>	
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	TS:	* -		
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	TS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:								
-					····			
		TOIL V	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COOLING COIL	N/A:	IOK: X				II		RP-BD:
	N/A: N/A: X	OK: X OK:		SIZE:	CNTLVLV	IIOK:	IRP-ACT:	
HEATING COIL	ll l	1	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: OK:	RP- ACT:	
HEATING COIL PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE: SIZE: SIZE:		OK: OK: OK:	RP- ACT: RP- ACT:	
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

HILLER / EQUIP. NO.  EFG. EQUIP. TYPE:  -WCT = Centrifugal w/ Wate  -WCT = Reciprocating w/ W  CCU = Air Cooled Condens  OMP. MOTOR  OMP. MOTOR  OMP. MOTOR	C Rer Side Cooling /ater Side Cooling Unit	CH-1 R-ACCU g Tower	LOCATION (RM MFG.: TS R- AS	<u> </u>	SC2CS15
HILLER / EQUIP. NO.  EFG. EQUIP. TYPE:  -WCT = Centrifugal w/ Wate  -WCT = Reciprocating w/ W  CCU = Air Cooled Condens  OMP. MOTOR  OMP. MOTOR  OMP. MOTOR	C Rer Side Cooling /ater Side Cooling Unit I/A: C	CH-1 R-ACCU g Tower bling Tower	LOCATION (RM MFG.: TS R- AS	M) MER MODEL:	
REFG. EQUIP. TYPE: C-WCT = Centrifugal w/ Wate R-WCT = Reciprocating w/ WACCU = Air Cooled Condens COMP. MOTOR COMP. MOTOR	Rer Side Coolin /ater Side Cooling Unit	R-ACCU g Tower bling Tower	MFG.: TS	MODEL:	SC2CS15
C-WCT = Centrifugal w/ Water R-WCT = Reciprocating w/ WACCU = Air Cooled Condens COMP. MOTOR COMP. MOTOR COMP. MOTOR	er Side Cooling /ater Side Coo ing Unit	g Tower bling Tower	R-	ACCU = Reciprocating w/ Air Coole	
R-WCT = Reciprocating w/ WACCU = Air Cooled Condens COMP. MOTOR COMP. MOTOR COMP. MOTOR	/ater Side Coo ing Unit I/A: C	oling Tower	AS		d Condensing Unit
ACCU = Air Cooled Condens COMP. MOTOR COMP. MOTOR COMP. MOTOR	ing Unit NA: C			SB-WCT = Absorption w/ Water Side	
COMP. MOTOR NOTOR NOTOR NOTOR NOTOR NOTOR	J/A: C	NC Y	O.	Γ = Cooling Tower	•
COMP. MOTOR	I/A: C	//\. \^	REPLACE:	SIZE:	
		OK:	REPLACE:	SIZE:	
	VA: C	K:	REPLACE:	SIZE:	
COMP. MOTOR	√A: C	)K:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: C	OK: X	REPLACE:	SIZE: LARKIN M	OD: FCA-16
CT/ACCU FAN MTR	√A: C	OK: X	REPLACE:	SIZE: 2 @ 1/2 HI	P
CT/ACCU FAN MTR	√A: C	OK:	REPLACE:	SIZE:	
COMMENTS: C	OMPRESSO	R IN MER	OWER OUTSID	Œ	
COOLING TOWER	VA: X	DK:	REPLACE:	SIZE:	
AIR COOLED COND.	V/A: C	OK: X	REPLACE:	SIZE:	
COMMENTS:					
CHILLER INSUL.	VA: C	OK: X	MISSING:	ESTIMATED QUANTIT	Y:
CHW PIPE INSUL.	V/A: C	DK:	MISSING: X	ESTIMATED QUANTIT	Y: 15' @ 2-1/2"
		OK: X	REPLACE:	SIZE: 1 HP	
		OK: X	REPLACE:	SIZE:	
		DK:	REPLACE:	SIZE:	
CHW PUMP SEALS		DK:	REPLACE:	SIZE:	
		OK:	REPLACE:	SIZE:	
	1_	OK:	REPLACE:	SIZE:	
1 11		OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG: 7608 FILE: 7608.XLS **BOILER & CONVERTER - HVAC UPGRADE OBSERVATIONS** BOILER/CONVERTER NO. BLR-1 LOCATION (RM) BOILER TYPE: HW MFG.: MODEL: 40-5-201 **OSAGE** CONVERTER TYPE: MFG.: MODEL: STM/HW - Steam to Hot Water Conv. STM - Steam HTHW/STM - High Temp HW to Steam Convertor HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: OK: REPLACE: COMMENTS: BLR PUMP MOTOR N/A: OK: REPLACE: SIZE: BLR PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: PUMP UNINSULATED AND PIPES TO PUMP ARE RUSTY BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: BOILER HAS SOME RUST ON IT. ASBESTOS ON FLUE. **HW PUMP MOTOR** N/A: OK: X REPLACE: SIZE: 1/2 HP HW PUMP SEALS N/A: OK: X REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL N/A: OK: MISSING: ESTIMATED QUANTITY: COMMENTS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/12/94

PREPARED BY: AJN/CWW

### **BUILDING DATA SURVEY OBSERVATIONS**

**BLDG NUMBER: 7652** 

GAS METER: N SUSPECT ACM: Y

**BLDG NAME: ADMIN & SUPPORT BLDG** 

SAT:

0

ELECTRIC METER: N

LOCATION: FT. RILEY, KS

CONDITIONED SQFT:

13,520

### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO:

MON:

SUN: PRES START: 0 PRES STOP: 24 **REQ START:** 0

0 0 24 24 24 5 5 5 17

TUE:

FRI: THUR: WED: 0 0 0 24 24

24 5 5 0 17 17 17 0

#### **REMARKS:**

REQ STOP:

Suspect ACM is located on pipe fittings and boiler.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/12/94
PREPARED BY: AJN/CWW

BUILDING NUMBER: AHU NUMBER:		AHU LOCATION: STORAGE ROOM	
REFRIG SYS # SRVNG AHI	-	SERVES AREA: OFFICE AREA 1  G AREA HEATED:	0
AHU UNIT TYPE SINGLE	ZONE	NUMBER OF ZONES IF MZ U	NIT: 0
CFM-HTG:	0	CFM-CLG: 940	
MIN %OA:	20	MAX %OA: 20	
NAMEPLATE			
UNIT MFG:	DUNHAM BUSH	UNIT MODEL: VAH-22	
SUPPLY FAN HP:	0.75	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	6C`92M47	RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:			
REHEAT COIL:	,		
	NONE	📮	
COOLING COIL:	CW	<u> </u>	
SCHEDULE			
DAY SCHEDULE NO:	5	MONTH SCHEDULE NO:	2
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: TH	IUR: FRI: SAT:	
PRES START: 0		0 0 0	1
PRES STOP: 24	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24 24 24	
REQ START: 0	5 5 5	5 5 0	
REQ STOP: 0	17 17 17	<u> </u>	•
	IAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV:	DEC:
ON:			
CONTROLS			
TYPE OF CONTR	ROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE S	ETPOINT
PRESENT TEMP WINTR	OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR UN	occ: 0	COLD DECK DEG F: MIXED AIR DEG F:	0
PRESENT TEMP SUM	OCC: 0	OTHER SETPOINT DESCRIP:	U
PRESENT TEMP SUM UN		OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: N IMPLEMENT DEMAND L	MIT CNTRLS? N
MAX OA DMPR CONTROL:	N ECONOMIZER DB	CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL:	N ECONOMIZER WB	CONTROL: N TIME CLOCK OF	
EXH AIR DMPR CONTROL:	N	<del></del>	<del></del>
OTHER CONTROLS DE	SCR:		
	ENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER	R: 7652			
AHU NUMBER		AHU LOCATION	N: STORAGE ROOM	1
REFRIG SYS # SRVNG AI	HU:	SERVES AREA:	OFFICE AREA 2	
		BLDG AREA HEATED:		0
AHU UNIT TYPE SINGL	.E ZONE	NI NI	UMBER OF ZONES IF	MZ UNIT: 0
CFM-HTG:	0	CFM-CLG:	94	0
MIN %OA:	20	MAX %OA:		20
NAMEPLATE				,
UNIT MFG:	DUNHAM BUSH	UN	IIT MODEL: VAH-22	
SUPPLY FAN HP:	0.75	RET/EX	(H FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN		
SUPPLY FAN MTR MODEL: COMMENTS:	6C'92M47	RET/EXH FAN MI	TR MODEL:	
COILS				
Coil	Coil Type	Modulating	Valve?	
PREHEAT COIL:	NONE			
HEATING COIL:	NONE			
REHEAT COIL:		<b>_</b>		
HUMIDIFIER:	NONE			
COOLING COIL:	CW			
SCHEDULE				
DAY SCHEDULE NO:	5		MONTH SCHEDU	_E NO:2
SCHEDULE COMMENTS:				
SUN:	MON: TUE: WED	: THUR: FRI:	SAT:	
PRES START: 0	0 0 (	0 0 0	0	
PRES STOP: 24	24 24 24		24	) 
REQ START: 0		5 5 5 17 17 17	0	
REQ STOP: 0	17 17 17	<u> </u>		<u> </u>
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT: NO	DV: DEC:
ON:				
CONTROLS				
TYPE OF CONT	ROLS: PNEUMATIC	<i></i>		GLE SETPOINT
PRESENT TEMP WINTE	R OCC:	0	DECK DEG F:	0
PRESENT TEMP WINTR U	NOCC:	O:	DECK DEG F:	0
PRESENT TEMP SUI	M OCC:	with an order to the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract	DINT DESCRIP:	<u> </u>
PRESENT TEMP SUM U	<u></u>		POINT DEG F:	0
MIN OA DMPR CONTROL	: N MIXED AIR	DMPR CONTROL: N	IMPLEMENT DEM	AND LIMIT CNTRLS? N
MAX OA DMPR CONTROL	<u></u>	ER DB CONTROL: N		TIME CLOCK: N
RET AIR DMPR CONTROL	L: N ECONOMIZE	ER WB CONTROL: N	TIME CLO	OCK OPERATIONAL? N
EXH AIR DMPR CONTROL	L: N			
OTHER CONTROLS	DESCR:			
CONTROLS COMM	MENTS:		-	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBE		AUULI OOLTION OTODAGE DOOM
AHU NUMBE	R: AHU-3	AHU LOCATION: STORAGE ROOM
REFRIG SYS # SRVNG A	HU:	SERVES AREA: OFFICE AREA 3
	% C	OF BLDG AREA HEATED: 0
AHU UNIT TYPE SING	LE ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	0	CFM-CLG: 940
MIN %OA:	20	MAX %OA: 20
NAMEPLATE		
UNIT MFG:	DUNHAM BUSH	UNIT MODEL: VAH-22
SUPPLY FAN HP:		RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	6C'92M47	RET/EXH FAN MTR MODEL:
COMMENTS:	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	
COILS		·
Coil	Coil Type	Modulating Valve?
PREHEAT COIL:	NONF	П
HEATING COIL:		
REHEAT COIL:	NONE	
HUMIDIFIER:	·	
COOLING COIL:	CW	
SCHEDULE		
DAY SCHEDULE NO:	5	MONTH SCHEDULE NO: 2
SCHEDULE COMMENTS:		
SUN:	MON: TUE: WE	ED: THUR: FRI: SAT:
PRES START: 0	0 0	0 0 0
PRES STOP: 24	24 24	24 24 24
REQ START: 0	5 5	5 5 0
REQ STOP: 0	17 17	17 17 0
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CON	TROLS: PNEUMATIC	THERMOSTAT TYPE:
PRESENT TEMP WINT	R OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR U	JNOCC:	COLD DECK DEG F: 0  MIXED AIR DEG F: 0
	M OCC	0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SU		
PRESENT TEMP SU PRESENT TEMP SUM (		0 OTHER SETPOINT DEG F: 0
	JNOCC:	
PRESENT TEMP SUM (	JNOCC: MIXED AIF	R DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
PRESENT TEMP SUM U	JNOCC: L: N MIXED AIF L: N ECONOMI	R DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N IZER DB CONTROL: N TIME CLOCK: N
PRESENT TEMP SUM U MIN OA DMPR CONTRO MAX OA DMPR CONTRO	JNOCC: L: N MIXED AIR L: N ECONOMI L: N ECONOMI	R DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N IZER DB CONTROL: N TIME CLOCK: N
PRESENT TEMP SUM L MIN OA DMPR CONTRO MAX OA DMPR CONTRO RET AIR DMPR CONTRO	JNOCC:  L: N MIXED AIF L: N ECONOMIZ L: N ECONOMIZ L: N	R DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N IZER DB CONTROL: N TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**DATE:** 10/12/94 PREPARED BY: AJN/CWW

EMC NO: 1406-001

, , , , , , , , , , , , , , , , , , , ,	/ (				
BUILDING NUMBE	R: 7652				
AHU NUMBE	R: AHU-4	AHU LO	CATION: STO	RAGE ROOM	
REFRIG SYS # SRVNG A	HU:	SERVES	AREA: OFFICI	E AREA 4	<del></del>
		% OF BLDG AREA HE	ATED:		0
AHU UNIT TYPE SING	LE ZONE		NUMBER (	OF ZONES IF MZ	UNIT: 0
CFM-HTG:		0 CFI	M-CLG:	940	
MIN %OA:			( %OA:	20	
NAMEPLATE					
UNIT MFG:	DUNHAM BUSH		UNIT MODE	L: VAH-22	
SUPPLY FAN HP:		<del>,</del>	RET/EXH FAN H		0
SUPPLY FAN MTR MFG:		=	KH FAN MTR MF		THE COLUMN AND SEC
SUPPLY FAN MTR MODEL:		=	FAN MTR MODE		
COMMENTS:					
COILS					
Coil	Coil Type	Mod	lulating Valve?		
PREHEAT COIL:	NONE				
HEATING COIL:					
REHEAT COIL:	NONE				
HUMIDIFIER:	NONE				
COOLING COIL:	CW				
SCHEDULE					
DAY SCHEDULE NO:	5		MONT	TH SCHEDULE N	O: 2
SCHEDULE COMMENTS:					
SUN:	MON: TUE:	WED: THUR: F	RI: SAT:		
PRES START: 0	0 0	0 0	0 0		
PRES STOP: 24	24 24	24 24	24 24		1
REQ START: 0	5 5	5 5	5 0		
REQ STOP: 0	17 17	17 17	17: 0		
MONTHS JAN: FEB:	MAR: APR: MA	Y: JUN: JUL:	AUG: SEP:	OCT: NOV:	DEC:
ON:					П
CONTROLS					
TYPE OF CON	TROLS: PNEUMATION	С	THERMOSTAT		SETPOINT 0
PRESENT TEMP WINT	R OCC:	0	COLD DECK I		
PRESENT TEMP WINTR L	JNOCC:	0	MIXED AIR I		0
PRESENT TEMP SU	M OCC:	0 OTHER	R SETPOINT DES	SCRIP:	
PRESENT TEMP SUM L			ER SETPOINT D	EG F:	0
MIN OA DMPR CONTRO	L: N MIXED	AIR DMPR CONTRO	L: N IMPLE	EMENT DEMAND	LIMIT CNTRLS?
MAX OA DMPR CONTRO		OMIZER DB CONTRO	<del></del>		TIME CLOCK:
RET AIR DMPR CONTRO	==	MIZER WB CONTRO	T	TIME CLOCK	OPERATIONAL?
EXH AIR DMPR CONTRO			اسبيا		•
OTHER CONTROLS					
CONTROLS COM	MENTS:				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

## AIR HANDLING UNIT SURVEY OBSERVATIONS

BU	JILDING	NUMBE						<u>-</u>				PRICE NORMA
	AHU	NUMBE	R: AHU	1-5		AH	U LOCATIO	ON: STO	RAGE R	ООМ		
REFRIG	SYS#5	SRVNG A	HU:			SER	VES AREA	: OFFICI	E AREA			•
					% OF	BLDG ARE	A HEATED	):			0	)
AHU UHA	NIT TYP	E SING	LE ZONE				1	NUMBER (	OF ZONI	ES IF MZ	UNIT:	0
	С	FM-HTG:			0		CFM-CLG	<u></u>		940		
		IIN %OA:			20		MAX %OA			20		
NAMEP	LATI	Ε										
	UI	NIT MFG:	DUNH.	AM BUSH	1		U	NIT MODE	L: VA	H-22		
s	SUPPLY	FAN HP:		C	0.75		RET/E	XH FAN H	IP:		0	
SUPPLY	FAN M	TR MFG:	MARA	THON		RI	ET/EXH FA	N MTR MF	G:			
SUPPLY FA		MODEL:		Л47		RET/	EXH FAN N	ITR MODE	L:			
COILS												
	Coi	I		Coil Type	Э		Modulatin	g Valve?				
	PREHE	AT COIL:	NONE									
	HEATIN	NG COIL:	NONE									
	REHE	AT COIL:	NONE									
	HUN	IIDIFIER:	NONE									
	COOLIN	NG COIL:	CW									
SCHED												
SCHED	ULE		,									
	CHEDU	LE NO:	5					MONT	H SCHE	DULE NO	D:	2
	CHEDU		5					MONT	'H SCHE	EDULE NO	D:	2
DAY S	CHEDU		5 MON:	TUE:	WED:	THUR:	FRI:	MONT	H SCHE	EDULE NO	D:	2
DAY S	CHEDU E COMM	MENTS:		TUE:	WED:		FRI:		TH SCHE	EDULE NO	D:	2
DAY S SCHEDULI PRES ST PRES S	CHEDU E COMM	SUN: 0 24	MON: 0 24	0 24	0 24	24	24	SAT: 0 24	TH SCHE	EDULE NO	D:	2
DAY S SCHEDULE PRES ST PRES S REQ ST	CHEDU E COMM ART: STOP:	SUN: 0 24 0	MON: 0 24 5	0 24 5	0 24 5	0 24 5	0 24 5	SAT: 0 24 0	TH SCHE	EDULE NO	D:	2
DAY S SCHEDULI PRES ST PRES S	CHEDU E COMM ART: STOP:	SUN: 0 24	MON: 0 24	0 24	0 24	24	24	SAT: 0 24	TH SCHE	EDULE NO	D:	2
DAY S SCHEDULE  PRES ST PRES S REQ ST REQ S MONTHS	CHEDU E COMM ART: STOP:	SUN: 0 24 0	MON: 0 24 5	0 24 5 17	0 24 5 17	0 24 5	0 24 5 17	SAT: 0 24 0 0	OCT:	NOV:	DEC:	2
DAY S SCHEDULI PRES ST PRES S REQ ST REQ S	ART: TART: TART: TART:	SUN: 0 24 0 0	MON: 0 24 5	0 24 5 17	0 24 5 17 MAY:	0 24 5 17	0 24 5 17	SAT: 0 24 0 0				2
DAY S SCHEDULE  PRES ST PRES S REQ ST REQ S MONTHS	CHEDU E COMM	SUN: 0 24 0 0	MON: 0 24 5 17	0 24 5 17	0 24 5 17 MAY:	0 24 5 17 JUN: JU	0 24 5 17	SAT: 0 24 0 0 SEP:	OCT:	NOV:	DEC:	2
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:	CHEDU E COMM FART: STOP: STOP: JAN:	SUN: 0 24 0 0	MON:  0 24 5 17  MAR:	0 24 5 17	0 24 5 17 MAY:	0 24 5 17 JUN: JU	0 24 5 17 L: AUG:	SAT: 0 24 0 0 SEP:	OCT:	NOV:	DEC:	NT
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:  CONTRO	CHEDU E COMM TART: TOP: TART: TOP: JAN: U	SUN:  0 24 0 0 FEB:  OF CON'	MON:  0 24 5 17  MAR:  □ TROLS:	0 24 5 17	0 24 5 17 MAY:	0 24 5 17 JUN: JU	0 24 5 17 L: AUG:	SAT:  0 24 0 0 0 SEP:	OCT:	NOV:	DEC:	NT 0
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:	CHEDU E COMM TART: TOP: TART: TOP: JAN: U	SUN:  0 24 0 0 FEB:  OF CON'	MON:  0 24 5 17  MAR:  □ TROLS:	0 24 5 17	0 24 5 17 MAY:	0 	L: AUG:	SAT:  0 24 0 0 SEP:  CRMOSTAT DT DECK D	OCT:  TYPE: DEG F: DEG F:	NOV:	DEC:	NT
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:  CONTRO	CHEDUE COMME	SUN:  0 24 0 0 FEB:  OF CON'	MON: 0 24 5 17 MAR:  ITROLS: R OCC: JNOCC:	0 24 5 17	0 24 5 17 MAY:	0 24 5 17 JUN: JU ☑ ☑	L: AUG:	SAT:  0 24 0 0 SEP:  CMOSTAT DT DECK D AD DECK D XED AIR D	OCT:  TYPE: DEG F: DEG F: DEG F:	NOV:	DEC:	NT 0 0
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:  CONTRO	CHEDUE COMME	SUN:  0 24 0 0 FEB:  MP WINT	MON:  0 24 5 17  MAR:  ITROLS: R OCC: JNOCC:	0 24 5 17	0 24 5 17 MAY:	0 24 5 17 JUN: JU ☑ ☑	L: AUG:  THEF	SAT:  0 24 0 0 SEP:  CMOSTAT DI DECK D AXED AIR D POINT DES	OCT:  TYPE: DEG F: DEG F: DEG F: SCRIP:	NOV:	DEC:	NT 0 0
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:  CONTRO  PRESE PRESEN	CHEDUE COMM  CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART: CART:	SUN:  0 24 0 0 FEB:  OF CON' MP WINT WINTE L	MON:  0 24 5 17  MAR:  ITROLS: R OCC: JNOCC: M OCC: JNOCC:	0 24 5 17 APR: □	0 24 5 17 MAY: .	0 24 5 17 JUN: JU ☑ ☑	L: AUG:  THER HC COL MI THER SETF OTHER SE	SAT:  0 24 0 0 SEP:  CONT DECK DECK DECK DECK DECK DECK DECK DECK	OCT:  TYPE: DEG F: DEG F: DEG F: EG F: EG F:	NOV:	DEC:	NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:  CONTRO  PRESE PRESEN	CHEDUE COMM CART: CTOP:	SUN:  0 24 0 0 FEB:  WINTRU FEMP SUM L CONTRO	MON:  0 24 5 17  MAR:  CROCC: CROCC: MOCC: JNOCC: L: N	0 24 5 17 APR: □	0 24 5 17 MAY:	0 24 5 17 JUN: JUN: JUN 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	THER HOCOL	SAT:  0 24 0 0 0 SEP:  CMOSTAT DI DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND DECK D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND D AND	OCT:  TYPE: DEG F: DEG F: DEG F: EG F: EG F:	NOV:	DEC:	NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:  CONTRO  PRESE PRESEN PRESE MIN OA	CHEDUE COMM CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP:	FEB:  OF CON' MP WINT WINTEL FEMP SUMP SUMP CONTRO	MON:  0 24 5 17  MAR:  CROCC: CROCC: JNOCC: L: N L: N	PNEUM.	MAY:  ATIC  SED AIR DONOMIZE	0 24 5 17 JUN: JUN: JUN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	THER HOCOL MITHER SETF OTHER SE TROL: N TROL: N	SAT:  0 24 0 0 SEP:  MOSTAT DT DECK D AIR D POINT DES	OCT:  TYPE: DEG F: DEG F: SCRIP: EG F:	NOV:	DEC:  SETPOIL  LIMIT CI  TIME (	NT 0 0 0 0 NTRLS? N
DAY S SCHEDULI  PRES ST PRES S REQ ST REQ S  MONTHS ON:  CONTRO  PRESI PRESEN' PRESE MIN OA MAX OA	CHEDUE COMM  CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP: CART: CTOP:	FEB:  OF CON' MP WINT WINTE U FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM FEMP SUM	MON:  0 24 5 17  MAR:  ITROLS: R OCC: JNOCC: M OCC: JNOCC: L: N L: N L: N	PNEUM.	MAY:  ATIC  SED AIR DONOMIZE	0 24 5 17 JUN: JUN: JUN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	THER HOCOL MITHER SETF OTHER SE TROL: N TROL: N	SAT:  0 24 0 0 SEP:  MOSTAT DT DECK D AIR D POINT DES	OCT:  TYPE: DEG F: DEG F: SCRIP: EG F:	NOV:	DEC:  SETPOIL  LIMIT CI  TIME (	NT 0 0 0 0 NTRLS? N

CONTROLS COMMENTS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/12/94

PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER:	7652				BOILER	RM LOC	ATION:	MER		
BOILER UNIT										
SOURCE OF BLDG H		BLR/CONV	ERTER SE	RVES ARI	EA OR SE	RVICE:	ALL			
BOILER BOILER TAG: BOILER TYPE: FUEL TYPE:	BLR-1 HW (UP TO 2 NAT. GAS	250 DEG)		CON	ONVERTI	TAG:				: :
CENTRAL PLANT			,							! .
AMEPLATE			%	AREA HE	ATED BY	/ BB RAI	DIATION:			100
BOILER MFG: OSAGE UNIT MODEL: 40-5-201 COMMENTS:					AP OUTP CAP INP				800,000 1,000,000	
DAYS SCHEDULE NO: CHEDULE COMMENTS:	5					MONTH	H SECHD	ULE NO	1	1
PRES STOP: 2 REQ START:	0 0	TUE: 0 24 5 17	WED: T 0 24 5 17	HUR: 0 24 5 17	FRI:  0 24 5 17	SAT: 0 24 0 0				
MONTHS JAN: FEB: ON:	MAR:		AY: JUN:	JUL:	AUG:	SEP:	ост:	NOV:	DEC:	-
ONTROLS										
TYPE OF BLR CO OPERATING S TYPE OF BURNER CO	ETPOINT:	PNEUMAT	TIC 130 DEG F	or PSIG		RESE	T CONTR	ROLS: [	Y	•
CONTROLS CO	MMENTS:									<del></del> :

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/12/94 PREPARED BY: AJN/CWW

LOCATION: FT. RILEY, KS

## PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUN	BER:	7652				BLDG N	IAME: /	ADMIN &	SUPPOF	RT BLDG			
PER RAD (	SYSTEN	TAG) NO	: RAD	-1			RAD S	S LOCA	TION: F	PERIMET	ER OF B	LDG	
		HEATING	Sect and the	1	A.A. / . W		S	ERVES A	REA: 7	ALL			
RADI	ATION L	JNIT TYPI	E: HW					% AREA	HTG:		100	<u> </u>	
RADIA	ΓΙΟΝ	PUM	Р										
PUMP T	'AG: 1			PUM	P HP:	0.	75	PUMP	MFG:	MAGNETI	EK		
							ı	PUMP MO	ODEL:	8-165775-	01		
SCHED	ULE												
DA	YS SCHE	EDULE N	D:	5		MOI	NTHS SC	HEDULE	NO:		1		
SCHE	DULE C	OMMENT	s:										
		SUN:	MON:	TUE	WE	D: Th	łUR:	FRI:	SAT:				
PRES S	TART:	0	0		) = =======	0	0	0	0				
PRES	STOP:	24	24	24		24	24	24	24				
REQ S	TART:	0	5			5	5	5	0				
REQ	STOP:	0	17	17	<u> </u>	17	17	17	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	The second second
ON:	$\boxtimes$		$\boxtimes$	$\boxtimes$						$\boxtimes$		$\boxtimes$	:
CONTR	COLS												
TY	PE OF R	AD. CON	TROLS:										
	RADIA	TION CO	NTROL:	NONE									
	oc	C HT SPA	ACE SP:		0								
		C HT SPA			0			F	ESET C	ONTROL:	N		
	CONTR	OL COM	MENTS:	3-WAY	PNEUM	ATIC C	ONTROL	VALVE	LOCATE	D IN MER			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94
PREPARED BY: AJN/CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

	BLDG NAME: ADMIN & SUPPORT BLDG
REF. UNIT NUMBER/TAG: CH-1	LOCATION (MER#): MER
	AHU'S SERVED: AHU-1, 2, 3, 4, & 5
UNIT TYPE RECIPROCAT	ING WITH AIR COOLED CONDENSING UNIT
NAMEPLATE	
CHILLER MFG: TSI	TOWER MFG: TS!
CHILLER MODEL: SC2CS15	# OF TOWER FANS: 2
CHILLER SERIAL NO: 9129-7	TOWER FAN V: 230
CHILLER V: 230	TOWER FAN AMPS: 2.2
CHILLER AMPS: 62	TOWER FAN HP: 0.5
CHILLER PH: 3	
CHILLER CAP (TONS): 15	
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 5	MONTHS SCHEDULE NO: 2
SCHEDULE COMMENTS:	
SUN: MON: TUE:	WED: THUR: FRI: SAT:
PRES START: 0 0 0	0 0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 5 5	5 5 5 0
REQ STOP: 0 17 17	17 17 17 0
MONTHS JAN: FEB: MAR: APR: MA	AY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON.	
ON.	AY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON.	
ON:	
CONTROLS  TYPE OF CONTROLS: ELECTRIC	
CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT:	□         □         □           □         □         □           □         CNWS SETPOINT:         □
CONTROLS  TYPE OF CONTROLS: ELECTRIC	
CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: CWR SETPOINT:	□         □         □           □         □         □           □         CNWS SETPOINT:         □
ON:  CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT:  CWR SETPOINT:  PRESS LITE HI:  N	0 CNWS SETPOINT: 0 CNWR SETPOINT: 0
ON:  CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT:  CWR SETPOINT:  PRESS LITE HI:  PRESS LITE LOW:  N TEI	0 CNWS SETPOINT: 0 CNWR SETPOINT: 0 TEMP LITE HI: N OTHER INDICATIORS:
ON:  CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT:  CWR SETPOINT:  PRESS LITE HI:  PRESS LITE LOW:  N TEI	O CNWS SETPOINT: 0 CNWR SETPOINT: 0 TEMP LITE HI: N OTHER INDICATIORS: MP LITE LOW: N
ON:  CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT:  CWR SETPOINT:  PRESS LITE HI:  PRESS LITE LOW:  PRESS GAUGES:  CONTROLS COMMENTS:	O CNWS SETPOINT: 0 CNWR SETPOINT: 0 TEMP LITE HI: N OTHER INDICATIORS: MP LITE LOW: N
CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT:  CWR SETPOINT:  PRESS LITE HI:  PRESS LITE LOW:  PRESS GAUGES:  TE	O CNWS SETPOINT: 0 CNWR SETPOINT: 0 TEMP LITE HI: N OTHER INDICATIORS: MP LITE LOW: N

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7652

FILE:

7652.XLS

	AIR	IMIDLIN	G UNIT - HVAC I	OL CIVADE A				
AHU NO.:	AHU-1	LOCATIO	N (Rm) STOR	AGE AREA				
AHU TYPE:		MFG.:	DUNHAM BUSH		MODEL:	VAH-22		
SZ - Single Zone	H&V - Hea	ating & Vntltng	j. FC - F	an Coil (Indicate:	2P for 2 Pipe or	4P for 4 Pipe	9)	
MZ - Mulitzone	VAV - Vari	able Air Vol.	RHT -	Reheat System				
DD - Dual Duct	.UH - Unit I	Heater	.IND - I	nduction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	TYPICAL	FOR 5 AHU'S	, VERY OLD AND RUN	DOWN			DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	MALA.	Torr. V	IDEDLACE:	ICIZE.				
COMMENTS:	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
		11121210101	• •	1001111121	110.			
		IOK.	COMMENTS:					
INLET VANES	N/A: X	OK:	COMMENTS:	ICOMMEN	TS:	N/Δ		
INLET VANES RETURN AIR FAN	N/A: X OK:	REPLACE	FAN BEARINGS:	COMMEN		N/A		
INLET VANES RETURN AIR FAN RETURN FAN MOTOR	N/A: X		FAN BEARINGS:	COMMEN		N/A N/A		
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	N/A: X OK: OK:	REPLACE	FAN BEARINGS:	СОММЕЛ	TS:	N/A	IRP. ACT.	IRP.RD
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	N/A: X OK: OK:	REPLACE REPLACE	FAN BEARINGS: E: REPLACE:	COMMEN	CNTLVLV	N/A N/A	RP- ACT:	RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	N/A: X OK: OK: N/A: N/A: N/A: X	REPLACE REPLACE OK: X OK:	REPLACE:	SIZE:	CNTLVLV	N/A OK: OK:	RP- ACT:	RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT:	RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: X	REPLACE REPLACE OK: X OK:	REPLACE:	SIZE:	CNTLVLV	N/A OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X N/A: X	REPLACE  OK: X  OK:  OK:  OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X N/A: X	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR	N/A: X OK: OK: N/A: N/A: N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 8 Nov-94 CWW

CHECKED BY:

AJN

BLDG:

7652

			BLDG:	7652	<del></del>	FILE:	7652.XLS
	REFRIGE	RATION E	QUIPME	NT - HVA	C UPGRADE OF	BSERVATI	ONS
CHILLER / EQUIP. NO.		CH-1	LOCATION	, , , , , , , , , , , , , , , , , , , ,	MER		
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	TSI	MODE		
C-WCT = Centrifugal w/ \					Reciprocating w/ Air Co		
R-WCT = Reciprocating v		e Cooling Towe	er		Absorption w/ Water	Side Cooling To	ower
ACCU = Air Cooled Cond	densing Unit			CT = Coolin	•		
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:		
COMMENTS:							
COOLING TOWER	N/A: X	lok:	REPLACE:		SIZÉ:		
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:		
COMMENTS:		JOIN. X	INCI DIOL.		10144		
CHILLER INSUL. CHW PIPE INSUL.	N/A: N/A:	OK: X	MISSING:	X	ESTIMATED QUANTESTIMATED QUANTESTIMATED QUANTESTIMATED QUANTESTIMATED QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMATES QUANTESTIMA		20' @ 2-1/2*
COMMENTS:	JIWA.	JON.	IVIIOOIIVG.	^	LEST INIATED QUAN	1111.	20 @ 2-112
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:		
CHW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:		
CHW PUMP MOTOR	N/A: N/A:	OK:	REPLACE:		SIZE: SIZE:		
CHW PUMP SEALS							
CHW PUMP MOTOR	N/A: N/A:	OK:	REPLACE:		SIZE: SIZE:		
CHW PUMP SEALS			REPLACE:		SIZE:		
CHW PUMP MOTOR	N/A: N/A:	OK:	REPLACE:		SIZE:		
CHW PUMP SEALS							
COMMENTS:				D HAS A SMA	LL LEAK FROM COC	K NEAR PUMP	, , , , , , , , , , , , , , , , , , ,
	PUMP UN	NINSULATED,	4' @ 2-1/2".				

# ${\bf E}\ {\bf M}\ {\bf C}$ Engineers, inc.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 8 Nov-94 CWW

CHECKED BY:

AJN

BLDG:

7652

FILE:

7652.XLS

		R & CON		UPGRADE OBSERVATIONS	
BOILER/CONVERTER NO	O	BLR-1	LOCATION (RM)	MER	
BOILER TYPE:		HW	MFG.:	MODEL:	
CONVERTER TYPE:			MFG.:	MODEL:	
STM - Steam			ot Water Conv.	HTHW/STM - High Temp HW to Steam Convertor	
HW - Hot Water			p. HW to HW Cv.	DHW - Domestic Hot Water Convertor	
BOILER BURNER	ATMOSP		POWER: X	OK: X REPLACE:	
COMMENTS:				TROL VALVES AND MANUAL SHUT-OFF	
	VALVES.	RUSTED IN	TO POSITION. (ASBES	TOS) CONTROL VALVES OK.	
BLR PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:	1000	JOIN. A	INC. DAOL.	DIEC.	
OUNTIVILIATO.					
	*****				
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:	NOT BOL	TED TO PAD			
14.512.01				· · · · · · · · · · · · · · · · · · ·	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
		1			
0// 0// 0// 0// 0// 0// 0// 0// 0// 0//	Thurs se	101/	10501465	TA-F	
CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE:	
	IN/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:		<del>,</del>			
CV INSULATION	N/A: X	IOK:	MISSING:	[ESTIMATED QUANTITY:	
CV PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
	IIVA. A	JUN.	IMIOOIIAG:	JESTIMATED QUANTITY:	
COMMENTS:					
			· · · · · · · · · · · · · · · · · · ·		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

## **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7658 BLDG NAME: ADMIN & SUPPORT BLDG

ELECTRIC METER: N

CONDITIONED SQFT: 13,520

GAS METER: N
SUSPECT ACM: Y

### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 5

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	. 0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	. 24	24
REQ START:	0	5	5	5	5	5	0
REQ STOP:	0	17	17	17	17	17	0

#### **REMARKS:**

Building Contact: Sgt. Thornton @ Ext. 5213. suspect ACM is located on pipe fittings and boiler.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

## AIR HANDLING UNIT SURVEY OBSERVATIONS

-			
	BUILDING NUMBER AHU NUMBER		AHU LOCATION: STORAGE ROOM
	REFRIG SYS # SRVNG AF	411.	SERVES AREA: OFFICE AREA 1
	KEI KIO OTO # OKVITO AI		OF BLDG AREA HEATED: 37
	AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZONES IF MZ UNIT: 0
	CFM-HTG:	0	<b>CFM-CLG</b> : 940
	MIN %OA:	20	MAX %OA: 20
<u> </u>	NAMEPLATE		
	UNIT MFG:	DUNHAM BUSH	UNIT MODEL: VAH-22
	SUPPLY FAN HP:	0.75	RET/EXH FAN HP: 0
	SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR MFG:
	SUPPLY FAN MTR MODEL:	6C192M47	RET/EXH FAN MTR MODEL:
	COMMENTS:		
2	COILS		
	Coil	Coil Type	Modulating Valve?
	PREHEAT COIL:	NONE	
	HEATING COIL:	NONE	
	REHEAT COIL:		<u> </u>
	HUMIDIFIER:	NONE	
	COOLING COIL:	CW	
S	CHEDULE		
	DAY SCHEDULE NO:	5	MONTH SCHEDULE NO: 2
	SCHEDULE COMMENTS:		
	SUN:	MON: TUE: WE	ED: THUR: FRI: SAT:
	PRES START: 0	0 0	0 0 0 0
	PRES STOP: 24	24 24	24 24 24 24
	REQ START: 0	55	5 5 0
	REQ STOP: 0	17 17	<u>17</u> <u>17</u> <u>17</u> <u>0</u>
ı		MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
	ON:		
C	CONTROLS		
	TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
	PRESENT TEMP WINTE	ROCC:	HOT DECK DEG F: 0
	PRESENT TEMP WINTR U	NOCC:	COLD DECK DEG F: 0
	PRESENT TEMP SUM	4 OCC+	MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP:
	PRESENT TEMP SUM U		0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F: 0
	MIN OA DMPR CONTROL	. N MIYED AL	R DMPR CONTROL : N IMPLEMENT DEMAND LIMIT CUTTEL SO TH
	MIN OA DMPR CONTROL		
	MAX OA DMPR CONTROL	.: N ECONOMI	IZER DB CONTROL: N TIME CLOCK:
	MAX OA DMPR CONTROL RET AIR DMPR CONTROL	: N ECONOMI	
	MAX OA DMPR CONTROL	ECONOMI  N ECONOMI  N	ZER DB CONTROL: N TIME CLOCK:

CONTROLS COMMENTS: Thermostat modulates control valve.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/12/94

PREPARED BY: AJN/CWW

BUILDING NUMBER		AHU LOCATION: STORA	AGE ROOM
REFRIG SYS # SRVNG A		SERVES AREA: OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL OFFICE ADDITIONAL	0 0
AHU UNIT TYPE SINGL	F ZONE	NUMBER OF	ZONES IF MZ UNIT: 0
AND ONLY TIPE SINGE	LZONL	Nomber	LONEO II MIL OITH.
CFM-HTG:	0	CFM-CLG:	940
MIN %OA:	20	MAX %OA:	20
NAMEPLATE			
UNIT MFG:	DUNHAM BUSH	UNIT MODEL	: BAH-22
SUPPLY FAN HP:	0.75	RET/EXH FAN HP	•
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR MFG	
SUPPLY FAN MTR MODEL:	6C192M47	RET/EXH FAN MTR MODEL	•
COMMENTS:	t		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:			
REHEAT COIL:			
HUMIDIFIER: COOLING COIL:			
SCHEDULE			
DAY SCHEDULE NO:	5	MONTH	SCHEDULE NO: 2
SCHEDULE COMMENTS:			<u> </u>
SUN:	MON: TUE: WED: 1	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	:
REQ START: 0 REQ STOP: 0	$\frac{5}{17}$ $\frac{5}{17}$ $\frac{5}{17}$ $\frac{1}{17}$	$\frac{5}{17}$ $\frac{5}{17}$ $\frac{0}{0}$	
REGIOF			
MONTHS JAN: FEB:	MAR: APR: MAY: JUN	: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT T	YPE: SINGLE SETPOINT
PRESENT TEMP WINT	R OCC:	HOT DECK DE	
PRESENT TEMP WINTR U		COLD DECK DE	
DDECENT TEMP OU	W 000	MIXED AIR DE OTHER SETPOINT DESC	
PRESENT TEMP SUI PRESENT TEMP SUM U		OTHER SETPOINT DESC	
MIN OA DMPR CONTROL	.: N MIXED AIR DMP	R CONTROL: N IMPLEM	MENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL	.: N ECONOMIZER D	B CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL		/B CONTROL: N	TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL	L: N		
OTHER CONTROLS	ESCR:		
	/FNTS: Thermostat modulate	s control valve	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

N EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: AJN/CWW

#### AIR HANDLING UNIT SURVEY OBSERVATIONS

AIIVIIA	MDEING ONLI SON	(VET ODSERVATIONS
BUILDING NUMBER: AHU NUMBER:	<b>7658</b> AHU-3	AHU LOCATION: STORAGE ROOM
REFRIG SYS # SRVNG AHU		SERVES AREA: OFFICE AREA 3
	% OF BLDG A	REA HEATED: 0
AHU UNIT TYPE SINGLE	ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:		CFM-CLG: 940
MIN %OA:	20	MAX %OA: 20
NAMEPLATE		
UNIT MFG:	DUNHAM BUSH	UNIT MODEL: VAH-22
SUPPLY FAN HP:	0.75	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: N	MARATHON	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: 6	C192M47 RE	ET/EXH FAN MTR MODEL:
COMMENTS:		
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL:	IONE	_ 🗆
HEATING COIL:	IONE	
REHEAT COIL:	IONE	
	IONE	
COOLING COIL:	W	_ 🗵
SCHEDULE		
DAY SCHEDULE NO:	5	MONTH SCHEDULE NO: 2
SCHEDULE COMMENTS:		
SUN: N	ION: TUE: WED: THUR	R: FRI: SAT:
PRES START: 0		0 0
PRES STOP: 24		24 24 24
REQ START: 0		5 0
REQ STOP: 0	<u> 17                                   </u>	7 17 0
MONTHS JAN: FEB: MA	AR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS		
TYPE OF CONTRO	DLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR C	OCC: 0	HOT DECK DEG F: 0  COLD DECK DEG F: 0
PRESENT TEMP WINTR UNC	OCC: 0	MIXED AIR DEG F: 0
PRESENT TEMP SUM O	DCC: 0	OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNC		OTHER SETPOINT DEG F: 0
		F
MIN OA DMPR CONTROL:	MIXED AIR DMPR CO	
MAX OA DMPR CONTROL: RET AIR DMPR CONTROL:	N ECONOMIZER DB CC	
EXH AIR DMPR CONTROL:	N ECONOMIZER WB CC	ONTROL: N TIME CLOCK OPERATIONAL?
OTHER CONTROLS DES		

CONTROLS COMMENTS: Thermostat modulates control valve.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

**DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

	7658 AHU-4	AHU LOCATION: STORA	GE ROOM
		SERVES AREA: OFFICE A	
REFRIG SYS # SRVNG AHU:		GAREA HEATED:	0
AHU UNIT TYPE SINGLE Z	ONE	NUMBER OF	ZONES IF MZ UNIT: 0
CFM-HTG:	0	CFM-CLG:	940
MIN %OA:	20	MAX %OA:	20
NAMEPLATE			
UNIT MFG: D	UNHAM BUSH	UNIT MODEL:	VAH-22
SUPPLY FAN HP:	0.75	RET/EXH FAN HP:	· <b>O</b>
	ARATHON	RET/EXH FAN MTR MFG: RET/EXH FAN MTR MODEL:	
SUPPLY FAN MTR MODEL: 60 COMMENTS:	C192M47	REI/EAR FAN WIR WODEL.	100000
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: N	ONE		
HEATING COIL: N	ONE		
REHEAT COIL: N		📙	
HUMIDIFIER: N			
COOLING COIL: C	W		
SCHEDULE			
DAY SCHEDULE NO:	5	MONTH	SCHEDULE NO: 2
SCHEDULE COMMENTS:			
SUN: M	ON: TUE: WED: TH	IUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	:
PRES STOP: 24	24 24 24	24 24 24 5 0	
REQ START: 0 E	<u>5</u> <u>5</u> <u>5</u> <u>17</u> <u>17</u>	$\frac{5}{17}$ $\frac{5}{17}$ $\frac{0}{0}$	
NEQUION: 0			
MONTHS JAN: FEB: MA	R: APR: MAY: JUN:	JUL: AUG: SEP: C	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTRO	DLS: PNEUMATIC	THERMOSTAT TY	
PRESENT TEMP WINTR O	CC: 0	HOT DECK DEC	
PRESENT TEMP WINTR UNO	CC: 0	MIXED AIR DEG	
PRESENT TEMP SUM O	OCC: 0	OTHER SETPOINT DESCI	
PRESENT TEMP SUM UNO	CC: 0	OTHER SETPOINT DEG	6 F: 0
		• • • • • • • • • • • • • • • • • • • •	
MIN OA DMPR CONTROL:	N MIXED AIR DMPR		ENT DEMAND LIMIT CNTRLS? N
MIN OA DMPR CONTROL: MAX OA DMPR CONTROL:	N MIXED AIR DMPR N ECONOMIZER DB	CONTROL: N IMPLEM	ENT DEMAND LIMIT CNTRLS? N TIME CLOCK: N
		CONTROL: N IMPLEMI	<del></del>
MAX OA DMPR CONTROL:	N ECONOMIZER DB	CONTROL: N IMPLEMI	TIME CLOCK: N
MAX OA DMPR CONTROL: RET AIR DMPR CONTROL:	N ECONOMIZER DB N ECONOMIZER WB	CONTROL: N IMPLEMI	TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

**DATE:** 10/12/94 PREPARED BY: AJN/CWW

AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER: 7658 AHU NUMBER: AHU-5 AHU LOCATION: STORAGE ROOM  REFRIG SYS # SRVNG AHU: SERVES AREA: OFFICE AREA 5 % OF BLDG AREA HEATED:  AHU UNIT TYPE SINGLE ZONE NUMBER OF ZONES IF MZ U	
REFRIG SYS # SRVNG AHU:  SERVES AREA: OFFICE AREA 5 % OF BLDG AREA HEATED:  AHU UNIT TYPE SINGLE ZONE  NUMBER OF ZONES IF MZ U	
% OF BLDG AREA HEATED:  AHU UNIT TYPE SINGLE ZONE NUMBER OF ZONES IF MZ U	
AHU UNIT TYPE SINGLE ZONE NUMBER OF ZONES IF MZ U	
	0
	NIT: 0
CFM-HTG: 0 CFM-CLG: 940	
MIN %OA: 20 MAX %OA: 20	
NAMEPLATE	
UNIT MFG: DUNHAM BUSH UNIT MODEL: VAH-22	
SUPPLY FAN HP: 0.75 RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: 6C192M47 RET/EXH FAN MTR MODEL:	
COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: NONE	
HEATING COIL: NONE	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 5 MONTH SCHEDULE NO:	. 2
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0 0	:
PRES STOP: 24 24 24 24 24 24 24	•
REQ START: 0 5 5 5 0	1
REQ START:     0     5     5     5     5     5     0       REQ STOP:     0     17     17     17     17     17     0	
REQ STOP:       0       17       17       17       17       17       0         MONTHS JAN:       FEB:       MAR:       APR:       MAY:       JUN:       JUL:       AUG:       SEP:       OCT:       NOV:         ON:	DEC:
REQ STOP:         0         17         17         17         17         17         0           MONTHS         JAN:         FEB:         MAR:         APR:         MAY:         JUN:         JUL:         AUG:         SEP:         OCT:         NOV:	DEC:
REQ STOP:         0         17         17         17         17         0           MONTHS JAN:         FEB:         MAR:         APR:         MAY:         JUN:         JUL:         AUG:         SEP:         OCT:         NOV:           ON: <td></td>	
REQ STOP:         0         17         17         17         17         0           MONTHS JAN:         FEB:         MAR:         APR:         MAY:         JUN:         JUL:         AUG:         SEP:         OCT:         NOV:           ON: <td></td>	
REQ STOP: 0 17 17 17 17 0  MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: ON:	
REQ STOP: 0 17 17 17 17 17 0	ETPOINT  0 0
REQ STOP:         0         17         17         17         17         0           MONTHS JAN:         FEB:         MAR:         APR:         MAY:         JUN:         JUL:         AUG:         SEP:         OCT:         NOV:           ON:         Image:         Image: <td>ETPOINT 0</td>	ETPOINT 0
REQ STOP: 0 17 17 17 17 17 0	ETPOINT  0 0

CONTROLS COMMENTS: Thermostat modulates control valve.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/12/94

PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING N	JMBER:	7658				BOILER	RM LOCA	ATION:	MER		
BOILER UI	NIT										
SOURCE OF	BLDG HE	AT	BLR/CON	IVERTER	SERVES AF	REA OR S	ERVICE:	ALL			
●   BOIL	ER				2 🗆	CONVERT	ER				
		BLR-1			co	NVERTE	R TAG:				
BOILE	R TYPE:	HW (UP TO	250 DEG)			VERTER	L-				· .
FUE	L TYPE:	NAT. GAS			COI	NV HT SO	URCE:				
CENTRA	L PLANT I	DIRECT									
NAMEPLA	TE				% AREA H	EATED B	Y BB RAI	DIATION:			100
BOILER MFG:	OSAGE				BLR	CAP OUT	PUT (BTU	H):		800,000	
UNIT MODEL:	40-5-201				BL	R CAP IN	PUT (BTU	H):		1,000,000	<u>)</u>
COMMENTS:											
SCHEDULI	Ē										-
DAYS SCHEDU		5					MONTH	SECHD	ULE NO:	:	1
SCHEDULE COM	3										
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START		0	0	0	0	0	0				
PRES STOP:		<u>24</u> 5	5	<u>24</u> 5	<u>24</u> 5	<u>24</u> 5	24				
REQ STOP:		17	17	17	17	17	0				
			4.55			4110	050	007	NOV	DEO.	
MONTHS JAN ON:		MAR:	•		JUN: JUL 			OCT:	NOV:	DEC:	
	$\boxtimes$		$\boxtimes$					$\boxtimes$	$\boxtimes$		
CONTROL	S										
TYPE O	F BLR CO	NTROLS:	PNEUM	ATIC			RESE	T CONTE	ROLS: [	Υ	
OPE	RATING SE	ETPOINT:		130 <b>D</b> I	EG F or PSI	3 _.					
TYPE OF BU	RNER CO	NTROLS:									
CONT	ROLS CO	MMENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/12/94

PREPARED BY: AJN/CWW

## PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	7658				BLDG I	NAME:	ADMIN &	SUPPO	RT BLDG		<del> </del>	
PER RAD	(SYSTE	M TAG) NO	RAD	-1			RAD S	YS LOCA	TION:	PERMIET	ER OF E	BLDG.	
sol	JRCE OF	HEATING	BLR-	1			S	SERVES A		ALL		. x - 0 00-/ 20	
RAD	IATION (	JNIT TYPE	: HW					% AREA	HTG:		10	0	
RADIA	TION	PUMP	)										
PUMP 1	Γ <b>A</b> G: 1			PUN	MP HP:	0.	.75	PUMP	MFG:	RELIANC	E		
								PUMP M	ODEL:	P14G316	1M-FT		
SCHED	ULE						·						
DA	YS SCHI	EDULE NO			5	MO	NTHS SC	HEDULE	NO:		1		
SCHE	DULE C	OMMENTS	:										
		SUN:	MON:	TUE	: WE	D: TI	IUR:	FRI:	SAT:				!
PRES S	TART:	0	0		0	0	0	0	0				
PRES	STOP:	24	24	2	4	24	24	24	24				
REQ S	TART:	0	5		5		5	5	0				:
REQ	STOP:	0	17	1	7	<u> 17</u>	17	17	0				
MONTHS ON:	JAN:	FEB: N	/AR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
UN:	$\boxtimes$	$\boxtimes$		X						$\boxtimes$	$\boxtimes$	$\boxtimes$	1
CONTR	ROLS												
TY	PE OF R	AD. CONT	ROLS:										
	RADIA	TION CON	TROL:	NONE									
	ос	C HT SPAC	E SP:		0								
		C HT SPAC			0			R	ESET C	ONTROL:	N		
	CONTR	OL COMM	ENTS:	3-WAY	PNEUM	ATIC C	ONTROL	VALVE I	LOCATE	D IN MER			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: AJN/CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7658	BLDG NA	ME: ADMIN & SUPPORT	BLDG
REF. UNIT NUMBER/TAG	G: CH-1	LOCATION (M	ER#): MER
			RVED: AHU-1, 2, 3, 4, & 5
UNIT	TYPE RECIPROCATING WITH	AIR COOLED CONDENSIN	GUNIT
NAMEPLATE			
CHILLER MFG:	COPELAMETIC	TOWER MFG:	AIRCON MCQUAY
CHILLER MODEL:	9RS1-1500-THC	# OF TOWER FANS:	3
CHILLER SERIAL NO:	CTC821-01206	TOWER FAN V:	0
CHILLER V:	230	TOWER FAN AMPS:	0
CHILLER AMPS:	62	TOWER FAN HP:	0.75
CHILLER PH:	3		
CHILLER CAP (TONS):	15		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE	NO: 5	MONTHS SCHEDUL	_E NO: 2
SCHEDULE COMME	<u></u>		The second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of
SUN	I: MON: TUE: WED:	THUR: FRI: SAT:	
	0 0 0 0	0 0 0	
PRES STOP: 24		24 24 24	:
	0 5 5 5	5 5 0	1
	0 17 17 17	17. 17. 0	
MONTHS JAN: FEB:	: MAR: APR: MAY: JUN	N: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
<u> </u>			
CONTROLS			
TYPE OF CONTI	ROLS: ELECTRIC	 	
CWS SETI	POINT: 45	CNWS SETPOINT:	0
CWR SET		CNWR SETPOINT:	
DDECC I	ITE HI: N TEMP LIT	EHI: N OTHER INC	DICATIORS:
PRESS L PRESS LITE			DICATIONS.
PRESS GA			·
CONTROLS CO			
CW and CNW P	UMPS		
			OFNITURN
PUMP TAG: 1	PUMP HP:	1.5 PUMP MFG:	
PUMP SERVICE: CW PUN	/IP (Chilled vvater)	PUMP MODEL:	SC-184-KMH-6-302053

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7658

FILE:

7658.XLS

111110	AIR I					<del> </del>	<del> </del>	
AHU NO.:	AHU-1	LOCATIO	` '	.GE				
AHU TYPE:	SZ	MFG.:	DUNHAM BUSH		MODEL:	VAH-22		
SZ - Single Zone		ating & Vntltng		n Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit			duction System	·····			
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	AHU IS O	LD, DIRTY. T	YPICAL OF 5				DPR-ACT = Damp	er Actuator
· · · · · · · · · · · · · · · · · · ·							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:			-					
SUPPLY AIR FAN	OK: X	L	FAN BEARINGS:	COMMEN				
OUDDLY CANDAGE	OK: X	REPLACE		COMMEN	ITS:		· , , , , , , , , , , , , , , , , , , ,	
INLET VANES	N/A: X	OK:	COMMENTS:					
INLET VANES			COMMENTS: FAN BEARINGS:	COMMEN	ITS:	N/A	<del></del>	
INLET VANES RETURN AIR FAN	N/A: X		FAN BEARINGS:	COMMEN		N/A N/A		
INLET VANES RETURN AIR FAN RETURN FAN MOTOR	N/A: X OK:	REPLACE	FAN BEARINGS:					
INLET VANES RETURN AIR FAN RETURN FAN MOTOR	N/A: X OK:	REPLACE	FAN BEARINGS:					
INLET VANES RETURN AIR FAN RETURN FAN MOTOR	N/A: X OK:	REPLACE	FAN BEARINGS:					
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	N/A: X OK:	REPLACE	FAN BEARINGS:				RP- ACT:	RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	N/A: X OK: OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A	RP- ACT:	RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	N/A: X OK: OK:	REPLACE REPLACE	FAN BEARINGS:	COMMEN	CNTLVLV	N/A OK: *		
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	N/A OK: *	RP- ACT:	RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X OK: OK: N/A: N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
SUPPLY FAN MOTOR INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X OK: OK: N/A: N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X OK: OK: N/A: N/A: N/A: N/A: N/A: *LOOSE F	OK: X OK: OK: OK: OK: PNEUMATIC L	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: LINE TO CW CONTROL	SIZE: SIZE: SIZE: SIZE: VALVE	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X OK: OK: N/A: N/A: N/A: N/A: *LOOSE F	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: VALVE	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X OK: OK: N/A: N/A: N/A: N/A: *LOOSE F	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: VALVE	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X OK: OK: N/A: N/A: N/A: N/A: *LOOSE F	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: VALVE	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X OK: OK: N/A: N/A: N/A: N/A: *LOOSE F	OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: VALVE	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:	N/A: X OK: OK: N/A: N/A: N/A: N/A: *LOOSE F	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: VALVE	CNTLVLV CNTLVLV CNTLVLV	N/A OK: * OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7658

FILE:

7658.XLS

HILLER / EQUIP. NO.		CH-1	LOCATION (RM)	MER	
REFG. EQUIP. TYPE:		R-ACCU		LAMETIC MODEL:	
C-WCT = Centrifugal w/ W	/ater Side Co		1	CU = Reciprocating w/ Air Cooled Cond	ensing Unit
R-WCT = Reciprocating w			and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	VCT = Absorption w/ Water Side Coolin	
ACCU = Air Cooled Conde		J		Cooling Tower	•
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:			-		
	76	Joir.	Toron A OF	Tolar	
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:			11.20		
				4.7.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHILLER INSUL. CHW PIPE INSUL.	N/A: N/A:	OK: X	MISSING: X	ESTIMATED QUANTITY:	8' @ 3"
CHILLER INSUL.					8' @ 3"
CHILLER INSUL. CHW PIPE INSUL.					8' @ 3"
CHILLER INSUL. CHW PIPE INSUL. COMMENTS:	N/A:	OK:	MISSING: X	ESTIMATED QUANTITY:	8' @ 3'
CHILLER INSUL. CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR	N/A:	OK:	MISSING: X  REPLACE:	ESTIMATED QUANTITY:	8' @ 3"
CHILLER INSUL. CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A:	OK: X	MISSING: X  REPLACE: REPLACE:	SIZE: SIZE:	8' @ 3"
CHILLER INSUL. CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A: X	OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	8' @ 3"
CHILLER INSUL. CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR	N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	8' @ 3'
CHILLER INSUL. CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	8' @ 3"
CHILLER INSUL. CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A: X  N/A: X  N/A: X  N/A: X  N/A: X	OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	8' @ 3"

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

CV PIPE INSUL

COMMENTS:

N/A: X

OK:

MISSING:

EMC NO.: 1406-005

DATE: PREPARED BY: 8 Nov-94 CWW

CHECKED BY:

AJN

7658 BLDG: FILE: 7658.XLS **BOILER & CONVERTER - HVAC UPGRADE OBSERVATIONS** BOILER/CONVERTER NO. MER BLR-1 LOCATION (RM) BOILER TYPE: HW 40-5-201 MFG.: OSAGE MODEL: CONVERTER TYPE: MFG.: MODEL: STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: OK: REPLACE: COMMENTS: BLR PUMP MOTOR N/A: X REPLACE: OK: SIZE: BLR PUMP SEALS N/A: X REPLACE: OK: SIZE: COMMENTS: BLR INSULATION N/A: OK: X MISSING: **ESTIMATED QUANTITY:** PIPE INSULATION N/A: OK: X MISSING: **ESTIMATED QUANTITY:** COMMENTS: HW PUMP MOTOR REPLACE: SIZE: N/A: OK: X HW PUMP SEALS N/A: REPLACE: SIZE: OK: X N/A: X HW PUMP MOTOR OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION OK: MISSING: N/A: X ESTIMATED QUANTITY:

ESTIMATED QUANTITY:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

**BUILDING DATA SURVEY OBSERVATIONS** 

**BLDG NUMBER: 8021** 

**BLDG NAME: ADMIN & SUPPORT BLDG** 

ELECTRIC METER: N

CONDITIONED SQFT:

23,676

SUSPECT ACM: N

**BUILDING OCCUPANCY SCHEDULE** 

BUILDING SCHDULE NO:

GAS METER: N

TUE: THUR: FRI: SAT: MON: WED: SUN: PRES START: 0 0 0 0 0 0 24 24 24 24 24 24 24 PRES STOP: _____ 9 17 9 9 9 0 REQ START: 17 17 17 17. 0

**REMARKS:** 

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

### PREPARED BY: JM/AJN AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER: 802 AHU NUMBER: FC	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	CATION: ABOVE CEILING
REFRIG SYS # SRVNG AHU:	ENTRAL PLANT SERVES A	AREA: ADMINISTRATIVE OFFICES
NEI NIO O I O # ONVINO ANO.	% OF BLDG AREA HEA	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
AHU UNIT TYPE FAN COILS -	2 PIPE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	18,000 <b>CFM</b>	-CLG: 18,000
MIN %OA:		%OA: 20
NAMEPLATE		
UNIT MFG:		UNIT MODEL:
SUPPLY FAN HP:	1 R	ET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:		H FAN MTR MFG:
SUPPLY FAN MTR MODEL: COMMENTS:	RET/EXH F	AN MTR MODEL:
COILS		
Coil	Coil Type Modu	llating Valve?
PREHEAT COIL: NON		
HEATING COIL: HOT		
REHEAT COIL: NON! HUMIDIFIER: NON!		
COOLING COIL: CW		
SCHEDULE		
DAY SCHEDULE NO: 9		MONTH SCHEDULE NO: 3
· · · · · · · · · · · · · · · · · · ·	THE MED THIS FE	
PRES START: 0 MON:		RI: SAT: 0 0
PRES STOP: 24 24		24 24
REQ START: 0 9		9 0
REQ STOP: 0 17		17 0
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: A	AUG: SEP: OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONTROLS:	ELECTRIC 1	HERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0	COLD DECK DEG F: 0  MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC		SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHE	R SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL:	N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL:	
RET AIR DMPR CONTROL: N EXH AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL:	N TIME CLOCK OPERATIONAL? N
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

BUILDING NUMBER		AHU LOCATION: 3	SUDDI V BOOM	
AHU NUMBER	Υ: ΠV-1			
REFRIG SYS # SRVNG AI		SERVES AREA: SU BLDG AREA HEATED:	PPLY ROOM	12.6
	76 OF B	EDG AREA HEATED.		
AHU UNIT TYPE HEAT	ING AND VENTILATING	NUMB	ER OF ZONES IF MZ UNI	Τ: 0
CFM-HTG:	2,400	CFM-CLG:	0	
MIN %OA:	100	MAX %OA:	100	
NAMEPLATE				
UNIT MFG:		UNIT M	ODEL:	
SUPPLY FAN HP:	0.5	RET/EXH FA	N HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTF	RMFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR M	ODEL:	
COMMENTS:				
COILS				
Coil	Coil Type	Modulating Valv	re?	
PREHEAT COIL:	NONE			
HEATING COIL:	HOT WATER			
REHEAT COIL:	NONE	<u> </u>		
HUMIDIFIER:	NONE	<u> </u>		
COOLING COIL:	NONE			
SCHEDULE				
DAY SCHEDULE NO:	9	M	ONTH SCHEDULE NO:	1
SCHEDULE COMMENTS:				
SUN:	MON: TUE: WED:	THUR: FRI: SAT	:	
PRES START: 0	0 0 0	0 0 (	<u> </u>	
PRES STOP: 24	24 24 24	24 24 24	4	
REQ START: 0	9 9 9	9 9	<u>0</u>	
REQ STOP: 0	17 17 17	17. 17	<u>5</u>	
MONTHS JAN: FEB:	MAR: APR: MAY: JU	UN: JUL: AUG: SE	P: OCT: NOV: DE	C:
ON:				ব :
CONTROLS				<del> </del>
TYPE OF CONT	TROLS: ELECTRIC	THERMOS	FAT TYPE: SINGLE SET	POINT
	D 000	HOT DE	CK DEG F:	0
PRESENT TEMP WINTI		= COLD DE€	CK DEG F:	0
PRESENT TEMP WINTR U	JNOCC: 0	MIXED A	AIR DEG F:	0
PRESENT TEMP SUI	M OCC: 0	OTHER SETPOINT	DESCRIP:	!
PRESENT TEMP SUM U	JNOCC: 0	OTHER SETPOR	NT DEG F:	0
MIN OA DMPR CONTROL	L: N MIXED AIR DA	MPR CONTROL: N IN	IPLEMENT DEMAND LIM	IT CNTRLS? N
MAX OA DMPR CONTROL		DB CONTROL: N		ME CLOCK: N
RET AIR DMPR CONTROL		WB CONTROL: N	TIME CLOCK OPE	RATIONAL? N
EXH AIR DMPR CONTROL	<b>==</b>			-
OTHER CONTROLS	DESCR:			
CONTROLS COM	<u></u>			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

BUILDING NUMBER: 802° AHU NUMBER: HV-		I: SUPPLY AREA
REFRIG SYS # SRVNG AHU:	SERVES AREA:	THE RESIDENCE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF T
	% OF BLDG AREA HEATED:	12.6
AHU UNIT TYPE HEATING AND	) VENTILATING NU	JMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	2,400 CFM-CLG:	0
MIN %OA:	100 MAX %OA:	100
NAMEPLATE		
UNIT MFG:	UN	IT MODEL:
SUPPLY FAN HP:		H FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN	
SUPPLY FAN MTR MODEL:	RET/EXH FAN MT	R MODEL:
COILS		
Coil	Coil Type Modulating	Valve?
PREHEAT COIL: NONE		
	VATER 🖂	
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: NONE	; <b>L</b> J	
SCHEDULE		
DAY SCHEDULE NO: 9		MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI:	SAT:
PRES START: 0 0	0 0 0	0
PRES STOP: 24 24	24 24 24 24	24
REQ START: 0 9 REQ STOP: 0 17	$\frac{9}{17}$ $\frac{9}{17}$ $\frac{9}{17}$ $\frac{9}{17}$	0
True of the state		
MONTHS JAN: FEB: MAR: ON:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
CONTROLS		
TYPE OF CONTROLS:	·	OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	DECK DEG F: 0 DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0	ED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPO	
PRESENT TEMP SUM UNOCC:	0 OTHER SET	POINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL:	ECONOMIZER DB CONTROL: N	TIME CLOCK:
RET AIR DMPR CONTROL:	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N		
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

EMC NO: 1406-001

,		
BUILDING NUMBER: 8021 AHU NUMBER: HV-3	AHU LOCATION	: SUPPLY AREA
REFRIG SYS # SRVNG AHU:	SERVES AREA:	SUPPLY AREA
	% OF BLDG AREA HEATED:	12.6
AHU UNIT TYPE HEATING AND	VENTILATING NU	MBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	2,400 <b>CFM-CLG</b> :	0
MIN %OA:	100 MAX %OA:	100
NAMEPLATE		
UNIT MFG:	UNI	T MODEL:
SUPPLY FAN HP:	0.5 RET/EXF	FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN I	
SUPPLY FAN MTR MODEL: COMMENTS:	RET/EXH FAN MTF	R MODEL:
COILS		
Coil	Coil Type Modulating \	Valve?
PREHEAT COIL: NONE		
HEATING COIL: HOT W	ATER 🗵	
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: NONE	· L	
SCHEDULE		
DAY SCHEDULE NO: 9		MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI: S	SAT:
PRES START: 0 0	0 0 0	0
PRES STOP: 24 24	24 24 24 24	24
REQ START: 0 9	9 9 9 9	0
REQ STOP: 0 17	17 17 17 17	0
MONTHS JAN: FEB: MAR: ON:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
CONTROLS		
TYPE OF CONTROLS:		OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	DECK DEG F: 0 DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	. 0	D AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPO	INT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETF	POINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: Y	ECONOMIZER DB CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL:	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N		
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:		1

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/11/94 PREPARED BY: JM/AJN

=	3021	HILL COATION. CURRING POO	
_	HV-4 A	HU LOCATION: SUPPLY ROO	<u></u>
REFRIG SYS # SRVNG AHU:	SE % OF BLDG AF	REA HEATED:	12.6
AHU UNIT TYPE HEATING	AND VENTILATING	NUMBER OF ZONE	S IF MZ UNIT: 0
CFM-HTG:	2,400	CFM-CLG:	0.
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	0.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	RE	T/EXH FAN MTR MODEL:	I I
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: NO	DNE		
HEATING COIL: HC	T WATER	- <del>-</del> 🗵	
REHEAT COIL: NO	NE		
HUMIDIFIER: NO	DNE		
COOLING COIL: NO	NE		
SCHEDULE			
DAY SCHEDULE NO:	9	MONTH SCHE	OULE NO: 1
SCHEDULE COMMENTS:			
SUN: MC	N: TUE: WED: THUR:	: FRI: SAT:	
PRES START: 0	0 0 0 0	0 0	•
PRES STOP: 24	24 24 24 24	24 24	
REQ START: 0	9 9 9 9	9 0	
REQ STOP: 0	<u>17</u>	17 0	
MONTHS JAN: FEB: MAR	R: APR: MAY: JUN: J	UL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTROL	S: ELECTRIC	j L	SINGLE SETPOINT
PRESENT TEMP WINTR OC	CC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR UNOC		COLD DECK DEG F:	0
PRESENT TEMP SUM OC	···	MIXED AIR DEG F:	0
PRESENT TEMP SUM UNOC		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL:	N MIXED AIR DMPR CO	NTROL: N IMPLEMENT DI	EMAND LIMIT CHTRLS?
MAX OA DMPR CONTROL:	Y ECONOMIZER DB CO	<del></del>	TIME CLOCK:
RET AIR DMPR CONTROL:	Y ECONOMIZER WB CO	NTROL: N TIME O	LOCK OPERATIONAL?
EXH AIR DMPR CONTROL:	N	<b>L</b>	
OTHER CONTROLS DESC			
CONTROLS COMMENT	<b>5</b> :		İ

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

BUILDING NUMBEI AHU NUMBEI		AHU LOCATI	ON: SUPPLY AR	PFA	
REFRIG SYS # SRVNG A		SERVES ARE			
REFRIG 313 # SRVING A		% OF BLDG AREA HEATE	**************************************	12.6	
AHU UNIT TYPE HEAT	ING AND VENTILAT	ING	NUMBER OF ZON	IES IF MZ UNIT:	0
CFM-HTG:	2,4	CFM-CLC		0	
MIN %OA:		100 MAX %O	A:	100	
NAMEPLATE					
UNIT MFG:			JNIT MODEL:		
SUPPLY FAN HP:	0.		EXH FAN HP:	0	
SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL:		RET/EXH FAN I	N MTR MFG:		
COMMENTS:		· NETTEXT TO THE			
COILS					
Coil	Coil Type	Modulatir	ng Valve?		
PREHEAT COIL:	NONE				
HEATING COIL:		$\boxtimes$			
REHEAT COIL:					
HUMIDIFIER: COOLING COIL:					
	NONL				
SCHEDULE					
DAY SCHEDULE NO: SCHEDULE COMMENTS:	9		MONTH SCH	EDULE NO:	1
SUN:	MON: TUE:	WED: THUR: FRI:	SAT:		
PRES START: 0	0 0	0 0 0	<u> </u>		
PRES STOP: 24	24 24	24 24 24	24		
REQ START: 0	9 9	$\frac{9}{47}$ $\frac{9}{47}$ $\frac{9}{47}$	0		
REQ STOP: 0	17 17	17 17 17	0		
MONTHS JAN: FEB:	MAR: APR: M	AY: JUN: JUL: AUG	: SEP: OCT:	NOV: DEC:	-
ON:					<u>i</u>
CONTROLS					
TYPE OF CON	TROLS: ELECTRIC		RMOSTAT TYPE:	SINGLE SETPOINT	
PRESENT TEMP WINT	R OCC:	0	OT DECK DEG F: LD DECK DEG F:	0	
PRESENT TEMP WINTR L	INOCC:	0	IXED AIR DEG F:	0	
PRESENT TEMP SU	M OCC:	····	POINT DESCRIP:		
		0 OTHER S	ETPOINT DEG F:	0	
PRESENT TEMP SUM U	INOCC:				
PRESENT TEMP SUM U		D AIR DMPR CONTROL:	<del></del>	DEMAND LIMIT CNT	RLS? N
	L: N MIXE	D AIR DMPR CONTROL:	<del></del>	DEMAND LIMIT CNT	
MIN OA DMPR CONTRO	L: N MIXEI L: Y ECON	D AIR DMPR CONTROL:	N IMPLEMENT		ock: N

**PROJECT NAME:** EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/11/94

PREPARED BY: JM/AJN

## **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BLR/CONVERTER SERVES AREA OR SERVICE: ALL  SOURCE OF BLDG HEAT  BOILER BOILER TAG: CONVERTER TAG: CV-1 BOILER TYPE: CONVERTER TYPE: STM TO HTHW FUEL TYPE: CONV HT SOURCE: STEAM FROM CENTRAL PLANT	
SOURCE OF BLDG HEAT  BOILER BOILER TAG: BOILER TYPE: CONVERTER TAG: CONVERTER TYPE: STM TO HTHW	
BOILER TAG: CONVERTER TAG: CV-1 BOILER TYPE: CONVERTER TYPE: STM TO HTHW	
BOILER TAG: CONVERTER TAG: CV-1 BOILER TYPE: CONVERTER TYPE: STM TO HTHW	
FUEL TYPE: CONV HT SOURCE: STEAM FROM CENTRAL PLANT	
© CENTRAL PLANT DIRECT	
NAMEPLATE % AREA HEATED BY BB RADIATION:	0
BOILER MFG: BLR CAP OUTPUT (BTUH): 450,000	
UNIT MODEL: BLR CAP INPUT (BTUH): 0	
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 9 MONTH SECHDULE NO: 1 SCHEDULE COMMENTS:	:
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0 0 0 0	
PRES STOP: 24 24 24 24 24 24 24	
REQ START: 0 9 9 9 9 0	
REQ STOP: 0 17 17 17 17 0	
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
ON:	
CONTROLS	
CONTROLS	<del>,</del>
CONTROLS  TYPE OF BLR CONTROLS: RESET CONTROLS: N	<b>.</b>

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER: 802	21 BOILER RM LOCATION: MER
BOILER UNIT	
	BLR/CONVERTER SERVES AREA OR SERVICE:
SOURCE OF BLDG HEAT	
BOILER	CONVERTER
BOILER TAG:	CONVERTER TAG:
BOILER TYPE:	CONVERTER TYPE:
FUEL TYPE:	CONV HT SOURCE:
© CENTRAL PLANT DIR	ECT
NAMEPLATE	% AREA HEATED BY BB RADIATION:
BOILER MFG:	BLR CAP OUTPUT (BTUH):
UNIT MODEL:	BLR CAP INPUT (BTUH):
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	9 MONTH SECHDULE NO: 3
SUN:	MON: TUE: WED: THUR: FRI: SAT:
PRES START: 0	0 0 0 0 0
PRES STOP: 24	<u>24</u> <u>24</u> <u>24</u> <u>24</u> <u>24</u> <u>24</u>
REQ START:0	9 9 9 9 0
REQ STOP:0	<u> 17 17 17 17 17 0</u>
MONTHS JAN: FEB:	MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF BLR CONT	ROLS: RESET CONTROLS: N
OPERATING SETF	
TYPE OF BURNER CONT	ROLS:
CONTROLS COMM	ENTS:
HW PUMP	
PUMP TAG: DTWP-1	PUMP HP: 2 PUMP MFG: MARATHON
PUMP SERVICE: DUAL TEM	PP PUMP MODEL: WVM143TTDR5336AA

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 7 Nov-94 CWW

CHECKED BY:

AJN

8021 BLDG: FILE: 8021.XLS AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS AHU NO.: CFC-1 LOCATION (Rm) AHU TYPE: 2P FC MFG.: MODEL: SZ - Single Zone H&V - Heating & Vntltng. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe) MZ - Mulitzone VAV - Variable Air Vol. RHT - Reheat System DD - Dual Duct UH - Unit Heater IND - Induction System O.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT ок: RP- ACT: R.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: E.A. DAMPER DPR-ACT N/A: X OK: REPLACE: SIZE: OK: RP- ACT: F. & B. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: ZONE DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: COMMENTS: DPR-ACT = Damper Actuator RP-ACT = Replace Actuator FILTER SECTION N/A: OK: X REPLACE: SIZE: COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: RETURN AIR FAN REPLACE FAN BEARINGS: COMMENTS: lok: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: COMMENTS: COOLING COIL REPLACE: RP- ACT: RP-BD: N/A: OK: X SIZE: CNTLVLV OK: HEATING COIL N/A: OK: X REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BD: PREHEAT COIL N/A: Х OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BD: REHEAT COIL N/A: X ок: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BD: COMMENTS: RP-ACT = Replace Actuator RP-BD = Replace Body AHU PUMP MOTOR N/A: OK: REPLACE: SIZE: AHU PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION MISSING: X ESTIMATED QUANTITY: 4' @ ~1" N/A: OK: DUCT INSULATION N/A: X **ESTIMATED QUANTITY:** OK: MISSING: COMMENTS:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

8021

FILE:

MODEL:		
or 2 Pipe or 4P for 4 F	Pipe)	
OPR-ACT OK:	RP- ACT:	
OPR-ACT OK: X		
OPR-ACT OK:	RP- ACT:	
OPR-ACT OK:	RP- ACT:	
OPR-ACT OK:	RP- ACT:	
	DPR-ACT = Dar	mper Actuator
	RP-ACT = Repla	ace Actuator
N/A		
		····
ONTLVLV OK:	RP- ACT:	
ONTLVLV OK: X	I	
ONTLVLV OK:	RP- ACT:	
CNTLVLV OK:	RP- ACT:	RP-BD:
	RP-ACT = Repl	ace Actualor
	RP-BD = Replac	ce Body
QUANTITY:	8'	
QUANTITY:		
_		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 7 Nov-94

CHECKED BY:

CWW AJN

BLDG:

8021

FILE:

BOI	LER &	CONVE	RTER - HVAC	UPGRADE OBSERVAT	IONS
BOILER/CONVERTER I	NO.	CV-1	LOCATION (RM)	MER	
BOILER TYPE:			MFG.:	MODEL:	
CONVERTER TYPE:		STM/HV	/ MFG.: OLD DO	MINION STEE MODEL: HE-208	34-MZ: SERIAL 1976
STM - Steam	STM/HW	' - Steam t	o Hot Water Conv.	HTHW/STM - High Temp H	W to Steam Convertor
HW - Hot Water	HTHW/H	W - High	Temp. HW to HW C	v. DHW - Domestic Hot Water	Convertor
BOILER TYPE: STM/HW MFG.: OLD DOMINION STI STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - HOT WATER STM/HW - HOT WATER STAM/HW - HOT WATER TO HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT WATER STAM/HW - HOT W		OK: REPLA	CE:		
COMMENTS:	8" DIA, 6	6' LONG C	ONVERTER		
					W. William Co.
		OK:			
	/ <del>  </del>	1			
COMMENTS:					
	PRV IS G	i00D; 3-V	AY CONTROL VAL	VE GOOD (SUMMER/WINTER (	CHANGEOVER)
	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:					
			REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
	11	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
			REPLACE:		
	/	OK:		SIZE:	
			REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:	
COMMENTS:					
					***************************************
	N/A:	JOK: X	REPLACE:	SIZE:	
COMMENTS:					
	17	7			
				ESTIMATED QUANTITY:	
CV PIPE INSUL.	N/A:	OK:	MISSING: X	ESTIMATED QUANTITY:	3' OF 2"
COMMENTS:					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 8057 BLDG NAME: ADMIN & SUPPORT BLDG

ELECTRIC METER: N

GAS METER: N
SUSPECT ACM: N

CONDITIONED SQFT: 23,676

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 4

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	6	6	6	6	6	0
REQ STOP:	0	17	17	17	17	17	0

### **REMARKS:**

**PROJECT NAME**: EEAP, FEASABILITY STUDY FOR INSTALLATION **EMC NO**: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

/ (11 < 11) (11 )	MO OM OUR LET OBOLINA MICHO			
BUILDING NUMBER: 8057				
AHU NUMBER: FC-1	AHU LOCATION: ABOVE CEILING			
REFRIG SYS # SRVNG AHU: CEN	manufacture of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the			
	% OF BLDG AREA HEATED:37			
AHU UNIT TYPE FAN COILS - 2	PIPE NUMBER OF ZONES IF MZ UNIT: 0			
CFM-HTG:	18,000 <b>CFM-CLG</b> : 18,000			
MIN %OA:	20 MAX %OA: 20			
NAMEPLATE				
AHU NUMBER: FC-1				
SUPPLY FAN HP:	1 RET/EXH FAN HP: 0			
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:			
	RET/EXH FAN MTR MODEL:			
COILS				
Coil	oil Type Modulating Valve?			
AHU NUMBER: FC-1				
	TER 🔛			
\				
	MONTH SCHEDULE NO: 3			
· · · · · · · · · · · · · · · · · · ·	THE WED THIS ED. ALT			
<b>REQ STOP</b> : 0 17	<u>17</u> <u>17</u> <u>17</u> <u>17</u> <u>0</u>			
MONTHS JAN: FER: MAR:	APR. MAY. JUN. JUL. AUG. SEP. OCT. NOV. DEC.			
ON:				
	HOT DECK DEG F: 0			
	COLD DECK DEG F: 0			
PRESENT TEMP WINTR UNOCC:	MIXED AIR DEG F: 0			
	THE GLOCK OPERATIONAL? N			
OTHER CONTROLS DESCR:				
CONTROLS COMMENTS:				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

N EMC NO: 1406-001 DATE: 10/11/94

LOCATION: FT. RILEY, KS PREPARED BY: JM/AJN

UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:  COILS  COIL COIL Type Modulating Valve?  PREHEAT COIL: HOT WATER REHEAT COIL: NONE HEATING COIL: NONE HUMIDIFIER: NONE COOLING COIL: NONE  BAY SCHEDULE  DAY SCHEDULE NO:  MONTH SCHEDULE NO:  3				
AHU NUMBER:	TV-I	_		
REFRIG SYS # SRVNG AH		<i>=</i>	UPPLY AREA	12.6
AHU UNIT TYPE HEATIN	G AND VENTILATING	NUM	BER OF ZONES IF MZ I	JNIT: 0
AHU NUMBER: HV-1				
AHU NUMBER: HV-1				
NAMEPLATE				
UNIT MFG:		UNIT	MODEL:	
SUPPLY FAN HP:	0.5	RET/EXH F	AN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MT	R MFG:	·
		RET/EXH FAN MTR	MODEL:	
COMMENTS:				-
COILS				
Coil	Coil Type	Modulating Va	lve?	
•				
		H		
COOLING COIL:	NONE			
SCHEDULE			<u>,</u>	
DAY SCHEDULE NO:	4		MONTH SCHEDULE NO	): 3
SCHEDULE COMMENTS:				· · · · · · · · · · · · · · · · · · ·
SUN:	MON: TUE: WED:	THUR: FRI: SA	T:	
PRES START: 0	0 0 0	0 0	0	
PRES STOP: 24	24 24 24		24	
				•
REQ STOP:0	<u>17</u> <u>17</u> <u>17</u>	17 17	0.	
	AR: APR: MAY: JUI	N: JUL: AUG: S	EP: OCT: NOV:	DEC:
ON:				$\boxtimes$
CONTROLS				
TYPE OF CONTR	OLS: ELECTRIC			
PRESENT TEMP WINTR	OCC: 0		<u></u>	
PRESENT TEMP WINTR UN	OCC: 0			
PRESENT TEMP SUM	occ.			
MIN OA DMPR CONTROL:	N MIXED AIR DMI	PR CONTROL: N I	MPLEMENT DEMAND	LIMIT CNTRLS?
		<del></del>	MPLEMENT DEMAND	LIMIT CNTRLS?
MAX OA DMPR CONTROL: RET AIR DMPR CONTROL:	Y ECONOMIZER I	DB CONTROL: N		LIMIT CNTRLS? N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

**DATE:** 10/11/94 PREPARED BY: JM/AJN

	BUILDING NUMBER: AHU NUMBER:	8057 HV-2	AHU LOCATION: SUPPLY AREA	
	REFRIG SYS # SRVNG AHU		SERVES AREA: SUPPLY AREA	· · · · · · · · · · · · · · · · · · ·
			G AREA HEATED:	12.6
	AHU UNIT TYPE HEATING	G AND VENTILATING	NUMBER OF ZONES IF	MZ UNIT: 0
	CFM-HTG:	2,400	CFM-CLG:	)
	MIN %OA:	100	MAX %OA: 10	0
١	AMEPLATE			
	UNIT MFG:		UNIT MODEL:	
	SUPPLY FAN HP:	0.5	RET/EXH FAN HP:	0
	SUPPLY FAN MTR MFG:	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	RET/EXH FAN MTR MFG:	<del></del>
	SUPPLY FAN MTR MODEL: COMMENTS:		RET/EXH FAN MTR MODEL:	
_	_			
_	COILS			
	Coil	Coil Type	Modulating Valve?	
	PREHEAT COIL:	NONE		
		HOT WATER	🗵	
	⊢	NONE		
	ļ	NONE NONE	H	
	Ŀ	TONE		
S	CHEDULE			·
	DAY SCHEDULE NO:	4	MONTH SCHEDUL	E NO: 3
	SCHEDULE COMMENTS:			
	<del></del>		IUR: FRI: SAT:	;
	PRES START: 0 24	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	0 0 0 24 24 24	
	REQ START: 0	$\frac{27}{6} = \frac{27}{6} $	$\frac{24}{6} = \frac{24}{6} = 0$	
	REQ STOP: 0	17 17 17	<del>17</del> 17 0	·
_				
1	ON:	AR: APR: MAY: JUN:		OV: DEC:
_				$\boxtimes$
9	CONTROLS			
	TYPE OF CONTRO	OLS: ELECTRIC		GLE SETPOINT
	PRESENT TEMP WINTR	OCC: 0	HOT DECK DEG F:	<u>0</u>
	PRESENT TEMP WINTR UNC	OCC: 0	MIXED AIR DEG F:	0
	PRESENT TEMP SUM ( PRESENT TEMP SUM UNC		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0,
	MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: N IMPLEMENT DEMA	ND LIMIT CNTRLS? N
	MAX OA DMPR CONTROL:	Y ECONOMIZER DB		TIME CLOCK: N
	RET AIR DMPR CONTROL:	Y ECONOMIZER WB		CK OPERATIONAL? N
	EXH AIR DMPR CONTROL:	N	<u></u>	
	OTHER CONTROLS DES			
	CONTROLS COMME			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

EMC NO: 1406-001

	ATT							
AHU NUMBE	R: <u>HV-3</u>		AHU L	OCATION:	: SUPPLY AR	EA		
AHU NUMBER: HV-3  REFRIG SYS # SRVNG AHU:  SERVES AREA:  % OF BLDG AREA HEATED:  AHU UNIT TYPE HEATING AND VENTILATING  NUMBER OF ZONES IF MZ UNIT:  CFMHTG:  CFM								
		% OF B	BLDG AREA H	EATED:			12.6	
AHU UNIT TYPE HEAT	ING AND VI	ENTILATING	- -	NU	MBER OF ZON	ES IF MZ L	JNIT: 0	
CFM-HTG:		2,400	CF	M-CLG:		0		
MIN %OA:		100	MA	X %OA:		100		
NAMEPLATE								
UNIT MFG:				UNI.	MODEL:			
SUPPLY FAN HP:		0.5		RET/EXH	I FAN HP:		0	
SUPPLY FAN MTR MODEL: COMMENTS:  COILS  Coil Coil Type Modulating Valve? PREHEAT COIL: NONE								
SUPPLY FAN MTR MODEL:	COMMENTS:  Coil Coil Type Modulating Valve?  PREHEAT COIL: NONE							
COMMENTS	COMMENTS:  Coil Coil Type Modulating Valve?  PREHEAT COIL: NONE							
COILS								
Coil	Co	il Type	Mo	dulating \	/alve?			
PREHEAT COIL:	NONE							
HEATING COIL:	HOT WAT	ER						
REHEAT COIL:	NONE							
HUMIDIFIER:	NONE		브					
COOLING COIL:	NONE		Ц					
SCHEDULE								
DAY SCHEDULE NO:	4				MONTH SCH	EDULE NO	: 3	
SCHEDULE COMMENTS:								
SUN:	MON:	TUE: WED:	THUR:	FRI: S	SAT:			
	24		24		24			
	6							
=====	17		17	17	0			
ON:								
		] 🗵 🖸	<u> </u>					
CONTROLS								
TYPE OF CON	TROLS: E	LECTRIC				SINGLE S		
PRESENT TEMP WINT	R OCC:	(	o o			<u> </u>		
PRESENT TEMP WINTR	JNOCC:	(	0					
PRESENT TEMP SH	M OCC:		ОТНЕ					
	<u></u>		=				0	
MIN OA DMPR CONTRO	L: N	WIXED VIB DI	MPR CONTPO	DL: N	IMPLEMENT	DEMANDI	IMIT CNTRLS	s? [N
MAX OA DMPR CONTRO	=	ECONOMIZER			.,,,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		TIME CLOCK	
RET AIR DMPR CONTRO	<del></del>	ECONOMIZER			TIME	CLOCK O	PERATIONAL	<u></u>
EXH AIR DMPR CONTRO	=			لنن		·· <b>·</b>		
OTHER CONTROLS	DESCR:							1
CONTROLS COM	<del></del>					·		į

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

	BUILDING AHU S SYS # S	NUMBE	R: HV-		% O	  F BLD(		OCATIO S AREA: IEATED:	SUPP	PLY ARE		12.6	  
AHU U	JNIT TYPE	E HEA	TING ANI	O VENTIL	ATING			N	UMBER	OF ZONI	ES IF MZ		0
	M	FM-HTG IN %OA		2	100			FM-CLG:			0 100		
	UN SUPPLY Y FAN M FAN MTR	IIT MFG FAN HP TR MFG			0.5		RET/I	RET/E) EXH FAN		IP:		0	
SCHED	REHEA HUM COOLIN	AT COIL IG COIL AT COIL IIDIFIER	: HOT V : NONE : NONE	VATER	•		Ma	odulating	y Valve?				
	SCHEDUL		4						MON.	ТН ЅСНЕ	DULE N	0:	3
PRES S' PRES S' REQ S' REQ S	STOP:	0 24 0 0	MON: 0 24 6 17	TUE: 0 24 6 17		D: TH 0 24 6 17	IUR: 0 24 6 17	FRI:  0 24 6 17	0 24 0 0				
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	ост: ⊠	NOV:	DEC:	
CONTR	OLS			*****									<del> </del>
	TYPE ( SENT TEN NT TEMP	IP WINT		ELECTR	RIC	0		HOT	MOSTAT I DECK I DECK I ED AIR I	DEG F: DEG F:	SINGLE	SETPOI	NT 0 0 0
	ESENT T					0		R SETPO					0
MIN OA Max oa Ret aif	A DMPR C A DMPR C R DMPR C R DMPR C	ONTRO ONTRO	L: N L: Y L: Y	ECC	NOMIZ	ER DB	CONTRO	DL: N	ı	EMENT D	CLOCK (	TIME	NTRLS? N CLOCK: N
	HER CON												

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

		AHULOC	ATION: SUPPLY	/ ARFA			
REFRIG 515 # SKVING P		% OF BLDG AREA HEATED:					
AHU UNIT TYPE HEAT	TING AND VENTILATIN	G	NUMBER OF	ZONES IF MZ U	NIT: 0		
CFM-HTG	: 2,400	CFM-	CLG:	0			
MIN %OA	: 10	0 MAX	%OA:	100			
NAMEPLATE							
UNIT MFG	:		UNIT MODEL:				
SUPPLY FAN HP	: 0.5	R	ET/EXH FAN HP:		0		
SUPPLY FAN MTR MFG					-		
		RET/EXH F/	AN MTR MODEL:				
COMMENTS							
COILS							
Coil	Coil Type	Modu	lating Valve?				
AHU NUMBER: HV-5							
		H					
	L						
	. NONE						
SCHEDULE							
DAY SCHEDULE NO:	4		MONTH	SCHEDULE NO	3		
SCHEDULE COMMENTS:							
REQ STOP: 0		17 17			<del></del>		
	MAR: APR: MAY	: JUN: JUL: A	UG: SEP: C	OCT: NOV:	DEC:		
ON:					$\boxtimes$		
AHU NUMBER: HV-5							
TYPE OF CON	TROLS: ELECTRIC	Т	HERMOSTAT TY	PE: SINGLE S	ETPOINT		
PRESENT TEMP WINT	TR OCC:	0					
AHU NUMBER: HV-5 SERVES ARRA: SUPPLY AREA  REFRIG SYS # SRVING AHU: SERVES ARRA: SUPPLY AREA  *** OF BLDG AREA HEATED: 12.6  AHU UNIT TYPE HEATING AND VENTILATING NOMBER OF ZONES IF MZ UNIT: 0  CFM-HTG: 2.400 CFM-CLG: 0 MAX **, COA: 100  NAMEPLATE  UNIT MFG: UNIT MODEL: 100  SUPPLY FAR MTR MFG: RET/EXH FAN MTR MFG: RET/EXH FAN MTR MFG: RET/EXH FAN MTR MFG: RET/EXH FAN MTR MFG: RET/EXH FAN MTR MFG: SUPPLY FAN MTR MFG: RET/EXH FAN MTR MODEL: COMMENTS:  COIL Coil Coil Type Modulating Valve?  PREHEAT COIL: NONE RET/EXH FAN MTR MODEL: REHEAT COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MONE COOLING COIL: NONE MIXED AIR MAY: JUN: JUN: JUN: JUN: JUN: JUN: JUN: JUN							
AHU NUMBER: HV.5 SERVES AREA: SUPPLY AREA  REFRIG SYS # SRVNG AHU:  SERVES AREA: SUPPLY AREA  **OF BLDG AREA HEATED:  AHU UNIT TYPE HEATING AND VENTILATING  CFM-HTG: 2.400 GFM-CLG: 0 MAX **OA: 100  **NAMEPLATE**  UNIT MFG: UNIT MODEL: SUPPLY FAN HP: 0.5 RETIZEN FAN HP: 0 SUPPLY FAN MTR MFG: RETIZEN FAN HP: 0 SUPPLY FAN MTR MFG: RETIZEN FAN HP: 0 SUPPLY FAN MTR MFG: RETIZEN FAN HP: 0 SUPPLY FAN MTR MFG: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MFG: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZEN FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN MTR MODEL: RETIZENT FAN HP: 0 SUPPLY FAN							
	<u> </u>				0		
MIN OA DMPR CONTRO	L: N MIXED	AIR DMPR CONTROL:	N IMPLEM	ENT DEMAND L	IMIT CNTRLS? N		
	<del></del>		N		TIME CLOCK: N		
RET AIR DMPR CONTRO	DL: Y ECONO	MIZER WB CONTROL:	N	TIME CLOCK O	PERATIONAL? N		
EXH AIR DMPR CONTRO	DL: N						
OTHER CONTROLS	DESCR:						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/11/94

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

	57	BOILER RM LO	CATION: MER	
BOILER UNIT				
— SOURCE OF BLDG HEAT		RVES AREA OR SERVICE	E: ALL	
			- COLIA	
				AL DIANT
FOEL TIPE.		CONVINT SOURCE.	STEAN PRON CENTR	AL PLANT
CENTRAL PLANT DIF	RECT			
NAMEPLATE	%	AREA HEATED BY BB R	ADIATION:	0
BOILER MFG:		BLR CAP OUTPUT (B'	TUH):	450,000
BOILER UNIT    SOURCE OF BLDG HEAT				
COMMENTS:				
W				
SCHEDULE				
DAYS SCHEDULE NO:	4	MON	ITH SECHDULE NO:	3
SCHEDULE COMMENTS:				
SUN:	MON: TUE: WED: T	HUR: FRI: SAT:		
PRES START: 0	0 0 0	0 0 0		:
				·
REUSTOP: 0	17 17 17	17 17 0		
	MAR: APR: MAY: JUN:	: JUL: AUG: SEP	COCT: NOV:	DEC:
ON:		$\boxtimes$ $\boxtimes$ $\boxtimes$		$\boxtimes$
CONTROLS				
TYPE OF BLR CONT	ROLS:	RES	SET CONTROLS:	N
OPERATING SET	POINT: 160 DEG F			
TYPE OF BURNER CONT	ROLS:	(		
CONTROLS COMM	IENTS:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NU	MBER: 8	3057					BOILER	RM LOC	ATION:	MER				
BOILER UN	IIT						·							
SOURCE OF	BI DG HE	ΔΤ	BLR/CO	NVERTER	SERV	ES ARE	A OR SI	ERVICE:						
					· · · · · · · · · · · · · · · · · · ·		NU/FDT							
· —	-					_	ONVERT VERTER	_						
	=			CONVERTER TYPE:										
4	COMMENTS:  CHEDULE  DAYS SCHEDULE NO: 4 CHEDULE COMMENTS:  SUN: MON: TUE: WEE PRES START: 0 0 0 0 PRES STOP: 24 24 24 24 REQ START: 0 6 6 REQ STOP: 0 17 17 11  ONTHS JAN: FEB: MAR: APR: MAY: ON:						CONV HT SOURCE:							
1	-													
● CENTRAL	PLANT D	IRECT												
NAMEPLA	ΓE				% A	REA HE	ATED B	Y BB RAI	DIATION					
-				:		BLR CA	AP OUT	UT (BTU	H):					
UNIT MODEL:								UT (BTU						
COMMENTS							<del></del>							
COMINENTS:	=													
SCHEDULE														
	==	4	*					MONT	H SECHE	ULE NO		3		
	SUN:	MON:	TUE:	WED:	ТН	UR:	FRI:	SAT:						
	0	0		====	: ===	0 _	0	0						
						24 =		24						
· ·							6	0						
REQ STOP:	0	17	1/	17		17	17	0						
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:			
ON:	$\square$	$\boxtimes$		$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	·		
CONTROLS	S													
TYPE OF	BLR CO	NTROLS:						RESE	T CONTI	ROLS: [	N			
OPER	ATING SE	TPOINT:		D	EG F	or PSIG								
TYPE OF BU	RNER CO	NTROLS:												
CONTR	ROLS COM	MENTS:												
HW PUMP														
PUMP TAG:	DTWP-1		PUN	IP HP:			1	PUMP M	FG: MA	RATHON				
DIIMP SERVICE	DUAL T	EMP PI IM	IP				PH	MP MOD	FI · M	/M143TTI	DR5336A	Δ		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG:

8057

FILE:

	AIR I	HANDLIN	G UNIT - HVA	C UPGRADE	OBSERVA	TIONS		
AHU NO.:	H&V-1-5	LOCATIO	N (Rm) SI	UPPLY AREA		······································		
AHU TYPE:	H&V	MFG.:		· · · · · · · · · · · · · · · · · · ·	MODEL:			
SZ - Single Zone	H&V - Hea	iting & Vntltn	g. F(	C - Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone	VAV - Var	able Air Vol.	R	HT - Reheat System				
DD - Dual Duct	UH - Unit I	Heater	, IN	ID - Induction System	ı			
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
COMMENTS:	O.A. & F.A	. INTERLOC	KED DAMPERS. 1	TYPICAL OF 5 H&V'S	SIN		DPR-ACT = Damp	er Actuator
	BUILDING	j.	and a second second second second second second second second second second second second second second second				RP-ACT = Replac	e Actuator
								· · · · · · · · · · · · · · · · · · ·
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	IDEDLAG	FAN BEARINGS:	COMME	NTC.			
SUPPLY FAN MOTOR		REPLACE						
INLET VANES	OK: X			СОММЕ	N15:			
	N/A: X	OK:	COMMENTS:	Tool we	1170	. 11/4		
RETURN AIR FAN	OK:		FAN BEARINGS:	COMME		N/A	· · · · · · · · · · · · · · · · · · ·	<u></u>
RETURN FAN MOTOR	OK:	REPLACE	-:	COMME	NIS:	<del></del>		
COMMENTS:								
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:1/2'	" CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replac	e Actuator
							RP-BD = Replace	Body
					<del> </del>			
AHU PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:				
COMMENTS:				· · · · · · · · · · · · · · · · · · ·				
PIPE INSULATION	N/A:	ОК:			TED QUANTITY		6'	
DUCT INSULATION	N/A:	OK:	MISSING:	ESTIMAT	FED QUANTITY			
COMMENTS:								
		and the same						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

8057

FILE:

			G UNIT - HVAC		OBSERVA"	TIONS			
AHU NO.:	FC-1	LOCATIO	N (Rm) ABOV	E CEILING					
HU TYPE:	2P FC	MFG.:			MODEL:				
SZ - Single Zone		ating & Vntltng	· ·	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	pe)		
/IZ - Mulitzone		iable Air Vol.		Reheat System					
DD - Dual Duct	UH - Unit	Heater		nduction System					
D.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
LA. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
OMMENTS:							DPR-ACT = Damper Actuator		
			•				RP-ACT = Replace Actuator		
TED SECTION	HAT/A	TOV: V	IDEDLACE:	SIZE:					
FILTER SECTION	N/A:	OK: X	REPLACE:	OIZE.					
COMMENTS:									
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:				
SUPPLY FAN MOTOR	OK: X	REPLACE			COMMENTS:				
NLET VANES	N/A: X	OK:	COMMENTS:	100			,		
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMENTS: N/A					
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A			
COMMENTS:	UN.	INET EXCE		JOOIVINE	110.	11//			
JOINNELLA 10.									
COOLING COIL	N/A:	OK: X*	REPLACE:	SIZE:	CNTLVLV	N/A	RP- ACT: RP-E		
FEATING COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-E		
PREHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-B		
REHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-E		
COMMENTS:			O CONTROL VALVE; E	ALANCING VAL	VES @ EACH		RP-ACT = Replace Actuator		
	FAN COIL	. UNIT					RP-BD = Replace Body		
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:					
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:					
COMMENTS:	[1//3. /\	IOIV.	1.12.00.	IOIEE.					
JOIVINIEN 10.									
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:				
DUCT INSULATION	N/A: X	OK:	MISSING:		ED QUANTITY:				
COMMENTS:									
,									

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 7 Nov-94

CHECKED BY:

CWW AJN

BLDG: **8057** FILE: 8057.XLS

	DOIL	er & con	VERIER - HVAC	<b>UPGRADE OBSERVATIO</b>	DNS
BOILER/CONVERTER NO.		CV-1	LOCATION (RM)	MER	
BOILER TYPE:		STM/HW	MFG.:	MODEL:	
CONVERTER TYPE:			MFG.:	MODEL:	
STM - Steam		- Steam to Hot		HTHW/STM - High Temp HW to	
łW - Hot Water			. HW to HW Cv.	DHW - Domestic Hot Water Cor	
OILER BURNER	ATMOSF	PHERIC:	POWER:	OK: REP	LACE:
COMMENTS:					
BLR PUMP MOTOR	N/A:	lok:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:					
BLR INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:	
PIPE INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:					
LIM PUMP MOTOR	][h]/A.	Tov	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK:	REPLACE:	ISI/F	
HIM DUMP SEALS	NI/A·	OK:	DEDI ACE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK: X OK: X	REPLACE:	SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A:	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: CHILLED WATER, OK.	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: O WATER, OK @ 3"	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: CHILLED WATER, OK. REPLACE: REPLACE: REPLACE: REPLACE: MISSING:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: OWATER, OK @ 3*	2LOALDIHAD
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: CHILLED WATER, OK.	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: O WATER, OK @ 3"	3' ON PUMP 3' ON CW PIPE

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 0227 BLDG NAME: ENL BARRACKS W/AS

ELECTRIC METER: N

CONDITIONED SQFT:

32,303

GAS METER: N SUSPECT ACM: N

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

SUN: MON: TUE: WED: THUR: FRI: 0 0 0 0 0 PRES START: 0 0 24 24 24 24 24 PRES STOP: 24 0 0 0 0 0 REQ START: 0 0 REQ STOP: 24 24 24 24 24 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**DATE**: 10/18/94

EMC NO: 1406-001

PREPARED BY: AJN/CWW

BUILDING NUMBER: 0227 AHU NUMBER: AHU-1 AHU LOCATION: MER 2ND FLR EAST  REFRIG SYS # SRVNG AHU: CH-1 SERVES AREA: 1ST AND 2ND FLR-EAST  % OF BLDG AREA HEATED: 40  AHU UNIT TYPE MULTI ZONE NUMBER OF ZONES IF MZ UNIT:  CFM-HTG: 10,120 CFM-CLG: 10,120 MIN %OA: 10 MAX %OA: 100  NAMEPLATE  UNIT MFG: UNIT MODEL:  SUPPLY FAN HP: 5 RET/EXH FAN HP: 0  SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL:  SUPPLY FAN MTR MODEL:  RET/EXH FAN MTR MODEL:	5
REFRIG SYS # SRVNG AHU:         CH-1         SERVES AREA:         1ST AND 2ND FLR-EAST           40           AHU UNIT TYPE MULTI ZONE         NUMBER OF ZONES IF MZ UNIT:           CFM-CLG:         10,120           MAX %OA:         10,120           MAX WOA:         100           NAMEPLATE           UNIT MODEL:           SUPPLY FAN HP:         5         RET/EXH FAN HP:         0           SUPPLY FAN MTR MFG:         MARATHON         RET/EXH FAN MTR MFG:           SUPPLY FAN MTR MODEL:         RET/EXH FAN MTR MODEL:	5
MULTI TYPE   MULTI ZONE   NUMBER OF ZONES IF MZ UNIT:	5
AHU UNIT TYPE MULTI ZONE  CFM-HTG: 10,120 CFM-CLG: 10,120 MAX %OA: 100  NAMEPLATE  UNIT MFG: UNIT MODEL: SUPPLY FAN HP: 5 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	5
CFM-HTG:         10,120         CFM-CLG:         10,120           MIN %OA:         10         MAX %OA:         100    NAMEPLATE  UNIT MFG:  SUPPLY FAN HP:  SUPPLY FAN HP:  SUPPLY FAN MTR MFG:  MARATHON  RET/EXH FAN MTR MFG:  SUPPLY FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MODEL:  RET/EXH FAN MTR MTR MTR MTR MTR MTR MTR MTR MTR MTR	5
MIN %OA: 10 MAX %OA: 100  NAMEPLATE  UNIT MFG: UNIT MODEL: SUPPLY FAN HP: 5 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
MIN %OA: 10 MAX %OA: 100  NAMEPLATE  UNIT MFG: UNIT MODEL: SUPPLY FAN HP: 5 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
UNIT MFG: UNIT MODEL: SUPPLY FAN HP: 5 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
SUPPLY FAN HP: 5 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
SUPPLY FAN HP:     5     RET/EXH FAN HP:     0       SUPPLY FAN MTR MFG:     MARATHON     RET/EXH FAN MTR MFG:       SUPPLY FAN MTR MODEL:     RET/EXH FAN MTR MODEL:	
SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
COMMENTO	
COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 10 MONTH SCHEDULE NO:	3
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0	
PRES STOP: 24 24 24 24 24 24 24	
REQ START: 0 0 0 0 0 0	
REQ STOP: 24 24 24 24 24 24 24	
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
ON:	
	ŗ
ONTROLS	
	<u> </u>
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOIN HOT DECK DEG F:	<u> </u>
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOIN  PRESENT TEMP WINTR OCC: 0 PRESENT TEMP WINTR UNOCC: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0	<u> </u>
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOIN PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: COLD DECK DEG F: 0 MIXED AIR DEG F: 0	<u> </u>
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOIN  PRESENT TEMP WINTR OCC: 0 PRESENT TEMP WINTR UNOCC: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0  OCOLD DECK DEG F: 0	
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: 0 PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0 PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG	
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: 0 PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0 PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG	TRLS?
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT  PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: 0  PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0  PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0  PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0  MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: Y IMPLEMENT DEMAND LIMIT CNTECONOMIZER DB CONTROL: N TIME CO	FRLS?
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: 0 PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0 PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG	FRLS?

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER: 0227  AHU NUMBER: AHU-2  AHU LOCATION: 2ND FLR MER WAST	
REFRIG SYS # SRVNG AHU: CH-1 SERVES AREA: 1ST AND 2ND WEST FLOORS  % OF BLDG AREA HEATED:	40
% OF BLUG AREA HEATED.	40
AHU UNIT TYPE MULTI ZONE NUMBER OF ZONES IF MZ UNIT:	5
<b>CFM-HTG</b> : 10,039 <b>CFM-CLG</b> : 10,039	
MIN %OA: 10 MAX %OA: 100	
NAMEPLATE	
UNIT MFG: UNIT MODEL:	-
	<u></u>
SUPPLY FAN MTR MFG: BALDOR RET/EXH FAN MTR MFG:	_ _! _!
SUPPLY FAN MTR MODEL: M3218T RET/EXH FAN MTR MODEL:	<u>=</u>
COMMENTS:	_
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 10 MONTH SCHEDULE NO:	3
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0 0	
PRES STOP: 24 24 24 24 24 24 24	
REQ START: 0 0 0 0 0 0	•
REQ STOP: 24 24 24 24 24 24 24	:
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC	<b>:</b>
	:
CONTROLS	
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETP	
PRESENT TEMP WINTR OCC: 0 HOT DECK DEG F:	
PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F:	<u>0</u>
PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEGOTAL:	0
MIN OA DMPR CONTROL: Y MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT	CNTRLS? N
MAX OA DMPR CONTROL: Y ECONOMIZER DB CONTROL: N TIN	E CLOCK: N
RET AIR DMPR CONTROL: Y ECONOMIZER WB CONTROL: N TIME CLOCK OPER	ATIONAL? N
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

E	BUILDING	NUMBE NUMBE		****			ALILI	OCATIO	N: MEE	DACEN	FENIT		
									N: MEF				_
REFRIC	G SYS#	SRVNG A	AHU: <u>C</u>	<del>-1</del> -1	% (	_ OF BLDG	SERVE AREA H	S AREA: IEATED:		ND 2ND	SOUTH E	BASEME 4	
AHU L	JNIT TYP	E SING	SLE ZONE	=				N	UMBER	OF ZON	ES IF MZ	UNIT:	0
<u> </u>	C	FM-HTG	:		1,100		C	FM-CLG:	,		1,100		
	N	IIN %OA			10		MA	XX %OA:			100		
NAMEF	PLAT	E											
	U	NIT MFG	:					UN	IIT MODI	EL:		A A TRANSPORTED TO THE TRANSPORT	
	SUPPLY		<b></b>		1			RET/EX	(H FAN H	IP:		0	
	Y FAN N			THON					MTR ME	222			
SUPPLY F							RET/EXI	I FAN M	TR MOD	EL:		<del></del>	
	COI	MMENTS	·										
COILS	Co	il		Coil Tyr			BA	dulating	. Valvo?				
			NONE	Coil Typ	···			dulating	vaive?				
		AT COIL NG COIL					_ 🖂						
		AT COIL					$ \stackrel{\bowtie}{\sqcap}$						
		/IDIFIER	-										
	COOL	NG COIL	: CW				🖂						
SCHED	ULE												
DAY	SCHEDU	LE NO:	10						MON.	тн ѕсні	EDULE N	0:	3
SCHEDUL	LE COM	MENTS:											
		SUN:	MON:	TUE	: WE	D: TH	UR:	FRI:	SAT:				<del></del>
PRES S		0	0		= ====	0	0	0	0				:
PRES	:	24	24	24		24	24		24				
REQ S		0	0			0 =			0				!
KEQ:	STOP:	24	24	24		24	24	24	24				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	<del></del> .
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\square$		$\boxtimes$	
CONTR	ROLS												
	TYPE	OF CON	ITROLS:	PNEUM	MATIC				MOSTAT		SINGLE		
PRES	SENT TE	MP WINT	TR OCC:			0			L DECK I		<u> </u>		0
PRESE	NT TEMP	WINTR	UNOCC:			0			DECK I		[		0
PF	RESENT	TEMP SL	JM OCC:			0	OTHE		DINT DES				Ĭ
	ENT TEN					0			POINT				0
MIN O	A DMPR	CONTRO	L: Y	Mi	XED AII	R DMPR	CONTRO	L: T	IMPL F	MENT I	DEMAND	LIMIT CN	TRLS?
	A DMPR		<u> </u>				CONTRO						LOCK:
	RDMPR						CONTRO			TIME	CLOCK (		
EXH AIF	RDMPR	CONTRO	L: N						•				
OTI	HER COM	ITROLS	DESCR-	[									
			MENTS:	Control			J!4!		·				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

CONTROLS COMMENTS:

EMC NO: 1406-001 DATE: 10/18/94

LOCATION: FT. RILEY, KS PREPARED BY: AJN/CWW

AIR H	IANDLING UN	IT SURVEY OF	SERVATI	ONS	
BUILDING NUMBE		AHU LOCATIO	ON: MER BASEN	IENT	<del></del> :
REFRIG SYS # SRVNG #		SERVES AREA OF BLDG AREA HEATED	· · · · · · · · · · · · · · · · · · ·	SOUTH BASEME 4	
AHU UNIT TYPE SING	SLE ZONE		NUMBER OF ZON	ES IF MZ UNIT:	0
CFM-HTG MIN %OA		CFM-CLG MAX %OA		1,100	
NAMEPLATE					
UNIT MFG SUPPLY FAN HP SUPPLY FAN MTR MFG SUPPLY FAN MTR MODEL COMMENTS	: 1 : MARATHON :			0	
COILS					
Coil PREHEAT COIL HEATING COIL REHEAT COIL HUMIDIFIER COOLING COIL	: STEAM : NONE : NONE	Modulatin	g Valve?		
SCHEDULE					
DAY SCHEDULE NO: SCHEDULE COMMENTS:	10		MONTH SCH	EDULE NO:	3
SUN:   PRES START:   0     PRES STOP:   24     REQ START:   0     REQ STOP:   24	MON: TUE: WI 0 0 24 24 0 0 24 24	ED: THUR: FRI:  0 0 0 0  24 24 24  0 0 0  24 24 24  24 24	SAT: 0 24 0 24		i 1
MONTHS JAN: FEB:	MAR: APR: MAY:				:
TYPE OF CON	ITROLS: PNEUMATIC	THEF	RMOSTAT TYPE:	SINGLE SETPOI	NT
PRESENT TEMP WIN' PRESENT TEMP WINTR PRESENT TEMP SUM	TR OCC: UNOCC: JM OCC:	0 COI 0 M 0 OTHER SETI	DT DECK DEG F: LD DECK DEG F: IXED AIR DEG F: POINT DESCRIP: ETPOINT DEG F:		0 0 0
MIN OA DMPR CONTRO MAX OA DMPR CONTRO RET AIR DMPR CONTRO EXH AIR DMPR CONTRO	DL: Y ECONOM DL: Y ECONOM DL: N	IR DMPR CONTROL: Y		DEMAND LIMIT CI TIME ( E CLOCK OPERAT	CLOCK: N
OTHER CONTROLS	DEGUN.				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/18/94 PREPARED BY: AJN/CWW

LOCATION: FT. RILEY, KS

BUILDING NUMBER: AHU NUMBER:		AHU LOCATION:	BASEMENT MER	
REFRIG SYS # SRVNG AH	U: CH-1	SERVES AREA: B	ASEMENT NE	
	% OF BLD	G AREA HEATED:	12	
AHU UNIT TYPE SINGLE	E ZONE	NUME	BER OF ZONES IF MZ UNIT: 0	
CFM-HTG:	2,800	CFM-CLG:	2,800	
MIN %OA:	10	MAX %OA:	100	
NAMEPLATE				
UNIT MFG:		UNIT	MODEL:	_
SUPPLY FAN HP:	1	RET/EXH F	AN HP: 0	
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MT	R MFG:	
SUPPLY FAN MTR MODEL:	WATER TO THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PARTY AND THE PAR	RET/EXH FAN MTR N	MODEL:	
COMMENTS:			<u></u>	
COILS				
Coil	Coil Type	Modulating Val	lve?	
PREHEAT COIL:	NONE			
HEATING COIL:	STEAM			
REHEAT COIL:				
	NONE			
COOLING COIL:	CVV	🔼		
SCHEDULE				_
DAY SCHEDULE NO:	10	ħ	MONTH SCHEDULE NO: 3	
SCHEDULE COMMENTS:				
	MON: TUE: WED: TH	IUR: FRI: SA	Т:	
PRES START: 0	0 0 0 =	0 0	<u>O</u> ,	
PRES STOP: 24	24 24 24		24	
REQ START: 0 = 24	$\frac{0}{24}$ $\frac{0}{24}$ $\frac{0}{24}$ $\frac{0}{24}$	0 0 24 2	<u>0</u> °	
REGIOF. 24	24 24 24	24 24 2	24	
MONTHS JAN: FEB: NON:	MAR: APR: MAY: JUN:	JUL: AUG: SI	EP: OCT: NOV: DEC:	
CONTROLS				
TYPE OF CONTR	ROLS: PNEUMATIC	THERMOS	TAT TYPE: SINGLE SETPOINT	
PRESENT TEMP WINTR	OCC: 0		CK DEG F: 0	
PRESENT TEMP WINTR UN	IOCC: 0		CK DEG F: 0 AIR DEG F: 0	
PRESENT TEMP SUM	occ: 0	OTHER SETPOINT		
PRESENT TEMP SUM UN		OTHER SETPOI		
MIN OA DMPR CONTROL:	Y MIXED AIR DMPR	CONTROL: Y	MPLEMENT DEMAND LIMIT CNTRLS?	N
MAX OA DMPR CONTROL:	Y ECONOMIZER DB		TIME CLOCK:	N
RET AIR DMPR CONTROL:	Y ECONOMIZER WB	CONTROL: N	TIME CLOCK OPERATIONAL?	N
EXH AIR DMPR CONTROL:	N			_
OTHER CONTROLS DE				
			JI .	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER: 0227	BOILER RM LOCATION: MER
OILER UNIT	
	SERVES AREA OR SERVICE: ALL
SOURCE OF BLDG HEAT	
● BOILER	CONVERTER
BOILER TAG: BLR-1	CONVERTER TAG:
BOILER TYPE: MED PRESS STEAM (15# TO 125#)	CONVERTER TYPE:
FUEL TYPE: NAT. GAS	CONV HT SOURCE:
CENTRAL PLANT DIRECT	
AMEPLATE	% AREA HEATED BY BB RADIATION: 0
BOILER MFG: KEWANNEE	BLR CAP OUTPUT (BTUH): 758,400
UNIT MODEL: TYPE C	BLR CAP INPUT (BTUH): 948,000
COMMENTS	
COMMENTS:	
CHEDULE	
	MONTH SECHDULE NO: 1
DAYS SCHEDULE NO: 10 CHEDULE COMMENTS:	MONTH SECREDEL NO.
SUN: MON: TUE: WED:	THUR: FRI: SAT:
PRES START: 0 0 0 0	0 0 0
PRES STOP: 24 24 24 24	24 24 24
REQ START: 0 0 0 0	
REQ STOP: 24 24 24 24	24 24 24
MONTHS JAN: FEB: MAR: APR: MAY: J	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: □ □ □ □ □	
ONTROLS	
TYPE OF BLR CONTROLS: ELECTRIC	RESET CONTROLS: Y
OPERATING SETPOINT: 0 DE	EG F or PSIG
TYPE OF BURNER CONTROLS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER:	0227			BOILER	RM LOCA	ATION:	MER-WE	ST	
<b>BOILER UNIT</b>									
SOURCE OF BLDG H	EAT BLI	R/CONVERTI	ER SERVES AR	EA OR SE	RVICE:	ALL			
BOILER  BOILER TAG:	BLR-2		co	ONVERTI NVERTER	_				
BOILER TYPE:	MED PRESS STI	EAM (15# TO 12	<del></del>	VERTER T	_				
CENTRAL PLANT	DIRECT								TO THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE PERSON AND THE
NAMEPLATE			% AREA H	EATED BY	/ BB RAD	DIATION:			0.
BOILER MFG: KEWAN	EE		BLR C	AP OUTP	UT (BTU	H):		758,400	)
UNIT MODEL: TYPE C			BLF	CAP INP	UT (BTU	H):		948,000	<u>)</u>
COMMENTS:									—
SCHEDULE									'
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	10				MONTH	SECHD	ULE NO:	patrion.	1
PRES STOP: 2	0 0 4 24 0 0	0	D: THUR: 0 0 24 24 0 0 24 24	FRI: 0 24 0 24	SAT: 0 24 0 24				
MONTHS JAN: FEB	MAR: AP	R: MAY:	JUN: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:						$\boxtimes$	$\boxtimes$	$\boxtimes$	<u>.</u>
CONTROLS									
TYPE OF BLR CO OPERATING S TYPE OF BURNER CO	ETPOINT:	ECTRIC 0	DEG F or PSIG		RESE	CONTR	ROLS: [	Y	
CONTROLS CO	MMENTS:								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94
PREPARED BY: AJN/CWW

### REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: (	0227	BLDG NAME: ENL	BARRACKS W/AS			
			LOCATION (MER#):	OUTSIDE		
REF. UNIT NUMBER/	IAG: CH-1		AHU'S SERVED:			
i	UNIT TYPE RECIPROCAT	TING WITH AIR COOLE				
•	THE RESILIES			'		
NAMEPLATE						
CHILLER MF	G: BOHN	-	TOWER MFG:			
CHILLER MODE	EL: VRB0655B	# OF T	OWER FANS:	2		
CHILLER SERIAL N	IO: BCI8097	TC	OWER FAN V:	208		
CHILLER	. V: 20	8 TOWE	R FAN AMPS:	16.2		
CHILLER AME	PS:11	8 TO\	VER FAN HP:	5		
CHILLER F	ንH:	3				
CHILLER CAP (TON	S):6	<u>5</u>				
COMMEN.	TS:					
SCHEDULE						
		MOI	ITUS SCHEDULE NO	: 2		
DAYS SCHED		MOI	NTHS SCHEDULE NO			
SCHEDULE CON	IMENIS:					
	SUN: MON: TUE:	WED: THUR:	FRI: SAT:	į		
PRES START:	0 0 0	0 0	0 0			
PRES STOP:	24 24 24	24 24	24 24			
REQ START:	0 0 0	0 0	00			
REQ STOP:	24 24 24	24 24	24 24			
	TED. MAD. ADD. B	MAY: JUN: JUL:	AUG: SEP: OC	T: NOV: DEC:		
MONTHS JAN: F	EB: MAR: APR: N			I, NOV. DEC.		
ом. _П						
CONTROL						
CONTROLS						
	ONTROLS: ELECTRIC					
エンカニ ヘニ へん	JININOLS. ELECTRIC					
TYPE OF CO						
	SETPOINT:	0 CN	WS SETPOINT:	0		
cws s	SETPOINT:		WS SETPOINT: WR SETPOINT:	0		
CWS S	SETPOINT:			0		
CWS S CWR S PRES	SETPOINT:	0 CN	WR SETPOINT:	0		
CWS S CWR S PRES PRESS	SETPOINT:  SS LITE HI: N  LITE LOW: N TE	0 CN TEMPLITE HI: N EMPLITE LOW: N	WR SETPOINT:	0		
CWS S CWR S PRES PRESS PRESS	SETPOINT:  SS LITE HI: N  LITE LOW: N TE	0 CN TEMP LITE HI: N EMP LITE LOW: N	WR SETPOINT:	0		
CWS S CWR S PRESS PRESS PRESS	SETPOINT:  SS LITE HI: N LITE LOW: N TE GAUGES: Y T S COMMENTS:	0 CN TEMPLITE HI: N EMPLITE LOW: N	WR SETPOINT:	0		
CWS S CWR S PRES PRESS PRESS	SETPOINT:  SS LITE HI: N LITE LOW: N TE GAUGES: Y T S COMMENTS:	0 CN TEMPLITE HI: N EMPLITE LOW: N	WR SETPOINT:	0		
CWS S CWR S PRESS PRESS PRESS	SETPOINT:  SS LITE HI: N LITE LOW: N TE GAUGES: Y T S COMMENTS:	0 CN TEMP LITE HI: N EMP LITE LOW: N TEMP GAUGES: Y	WR SETPOINT:	0		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

227

FILE:

	AIR I	HANDLIN	G UNIT - HVA	C UPGRADE (	DBSERVA	TIONS			
AHU NO.:	AHU-1	LOCATIO	N (Rm) B	ASEMENT MER, EAS	T				
AHU TYPE:	SZ	MFG.:			MODEL:				
SZ - Single Zone	H&V - Hea	ating & Vntltng	}. F(	C - Fan Coil (Indicate 2	an Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe)				
MZ - Mulitzone	VAV - Var	iable Air Vol.	R	HT - Reheat System					
DD - Dual Duct	UH - Unit	Heater	AI:	D - Induction System					
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
OMMENTS:							DPR-ACT = Dampi	er Actuator	
							RP-ACT = Replace	Actuator	
ILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:					
COMMENTS:									
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:				
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMEN					
NLET VANES	N/A: X	OK:	COMMENTS:					<del></del>	
RETURN AIR FAN	OK:	IREPLACE	FAN BEARINGS:	COMMEN	TS:	N/A			
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A			
COMMENTS:				100					
				***************************************					
2001 110 001	Harra	Tou	- In			71			
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:X	RP-BD:X	
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:	
PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK: OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD:	
COMMENTS:	1V/A. A	JOIN.	INCPLACE.	JOIZE.	CIVILVEV	ок:	RP- ACT:	RP-BD:	
OMMENTS.							RP-ACT = Replace		
	<del>u</del>				****		RP-BD = Replace B	Sody	
			***************************************				782-0-44		
HU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	<del>1-1-11-11-11-11-11-11-11-11-11-11-11-11</del>				
HU PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:					
COMMENTS:									
PIPE INSULATION	N/A:	JOK: X	MISSING:	JESTIMATE	D QUANTITY:				
DUCT INSULATION	N/A: X	OK:	MISSING:		D QUANTITY:				
COMMENTS:	TOWN X	IOIX.	INIOUING.	LOTIMATE	LU QUANTIT.				
ACTIVITY OF TAXAGE									
							*****		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

			BLDG:	227		FILE:	227.XLS	
	AIR	HANDLIN	IG UNIT - HVAC	UPGRADE O	BSERVA1	TIONS		
AHU NO.:	AHU-2	LOCATIO	N (Rm) EAS	TBASEMENT MER				
AHU TYPE:	SZ	MFG.:			MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltno	j. FC -	Fan Coil (Indicate 2F	for 2 Pipe or 4	IP for 4 Pipe	)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		- Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND -	Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Dampe	r Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A.	IOK: X	REPLACE:	SIZE:		·		
COMMENTS:	1(	1	1					<del></del>
O O WHITE LETTER.			********					
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMENTS	S:			
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMENTS	S:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMENTS	S:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMENTS	S:			
COMMENTS								
COMMENTS:								
COMMENTS:	<del></del>							
COMMENTS:					W-14			
	N/A:	JOK: X	REPLACE:	SIZE: 1-1/2"	CNTLVLV	OK:	RP- ACT:X	RP-BD:
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE: 1-1/2" SIZE:	CNTLVLV CNTLVLV	OK: OK: X	RP- ACT:X	
COOLING COIL HEATING COIL						- }1		RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A:	ок: х	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL  COMMENTS:	N/A: N/A: X	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:) RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace RP-BD = Replace E	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG:

227

FILE:

LILINO :	AHU-3		G UNIT - HVAC U	OOR WEST	CHOLINAY	1.0140		
AHU NO.: AHU TYPE:	MZ-5	LOCATIO MFG.:	N (KIN) 151 FL	OUR WEST	IMODEL:			
SZ - Single Zone		MFG.: ating & Vntltng		an Coil (Indicate :	MODEL:	AD for A Dia	<u>^\</u>	
SZ - Single Zone MZ - Mulitzone		aung & vnuung riable Air Vol.	•	an Coll (Indicate . Reheat System	ZP for Z Pipe or	4P for 4 Pipi	е)	
DD - Dual Duct	UH - Unit			reneal System				
O.A. DAMPER					DDD ACT		IDD ACT	
O.A. DAMPER R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER E.A. DAMPER	N/A: N/A: X	OK: X	REPLACE:	SIZE:	DPR-ACT DPR-ACT	OK: X OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:		OK:		
ZONE DAMPER	N/A: X N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT DPR-ACT	OK: X	RP- ACT:	
						UN. A		
COMMENTS:			IOT HOOKED UP, LINK	AGE DISCONN	ECTED.		DPR-ACT = Damp	
	1 WO DO	WN & 3 UP					RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	Nov. v	IDED: ACT	FANDEADINGS	Iconner	ITC.			<del>,</del>
	OK: X		FAN BEARINGS:		COMMENTS:			
SUPPLY FAN MOTOR	OK:	REPLACE		COMMEN	HS:	5 HP MAF	RATHON ELEC	
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN				
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	ITS:			
COMMENTS:								
COMMENTS:								
	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	(NONE)	RP- ACT:	RP-BD
COOLING COIL	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	(NONE) OK: X	RP- ACT:	RP-BD
COOLING COIL HEATING COIL PREHEAT COIL	11	OK: X						l
COOLING COIL HEATING COIL PREHEAT COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X AHU TYP ACTUATO	OK: X OK: OK: OK: OK: OK: OK: OKS HOOKE	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FOR THE DAMPERS A	SIZE: SIZE: SIZE: FLOOR HAS ALL	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X AHU TYP ACTUATO	OK: X OK: OK: ICAL OF TWO	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FOR THE DAMPERS A	SIZE: SIZE: SIZE: FLOOR HAS ALL	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR	N/A: X N/A: X N/A: X AHU TYP ACTUATO 3 ZONES	OK: X OK: OK: ICAL OF TWO DRS HOOKED DOWN & 2 U	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FOR THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF T	SIZE: SIZE: SIZE: FLOOR HAS ALL ND THIS UNIT H	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X AHU TYP ACTUATO 3 ZONES	OK: X OK: OK: ICAL OF TWO DRS HOOKED DOWN & 2 U	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FO TO THE DAMPERS AT P. REPLACE:	SIZE: SIZE: SIZE: FLOOR HAS ALL ND THIS UNIT H	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X AHU TYP ACTUATO 3 ZONES	OK: X OK: OK: ICAL OF TWO DRS HOOKED DOWN & 2 U	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FOR THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF THE DAMPERS AND PROPERTY OF T	SIZE: SIZE: SIZE: FLOOR HAS ALL ND THIS UNIT H	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X AHU TYP ACTUATO 3 ZONES	OK: X OK: OK: ICAL OF TWO DRS HOOKED DOWN & 2 U	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FO TO THE DAMPERS AT P. REPLACE:	SIZE: SIZE: SIZE: FLOOR HAS ALL ND THIS UNIT H	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X AHU TYP ACTUATO 3 ZONES	OK: X OK: OK: ICAL OF TWO DRS HOOKED DOWN & 2 U	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FO TO THE DAMPERS AT P. REPLACE:	SIZE: SIZE: SIZE: FLOOR HAS ALL ND THIS UNIT H	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X AHU TYP ACTUATO 3 ZONES	OK: X OK: OK: ICAL OF TWO DRS HOOKED DOWN & 2 U	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FO TO THE DAMPERS AT P. REPLACE:	SIZE: SIZE: SIZE: FLOOR HAS ALL ND THIS UNIT H SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X AHU TYP ACTUATO 3 ZONES  N/A: X N/A: X	OK: X OK: OK: ICAL OF TWO DRS HOOKED DOWN & 2 U OK: OK:	REPLACE: REPLACE: REPLACE: D. EXCEPT EAST 1ST FOR THE DAMPERS AND P. REPLACE: REPLACE:	SIZE: SIZE: SIZE: FLOOR HAS ALL ND THIS UNIT H SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV ZONE	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

	415	LANDI IN	BLDG:	227	ODCEDVA:	FILE:	227.XLS	
				C UPGRADE	ORSEKVA	HONS		
AHU NO.:	AHU-4	LOCATIO	V (RM) VVE	EST BASEMENT	MODEL:			
HU TYPE:	SZ	MFG.:	F.C.	- Fan Coil (Indicate :		4D for 4 Din	0)	
SZ - Single Zone		iting & vntiting iable Air Vol.		: - Fan Coil (indicate) IT - Reheat System	zr ioi z ripe oi	4F 101 4 F1P	<del>e</del> )	
MZ - Mulitzone	UH - Unit I			D - Induction System				
DD - Dual Duct			REPLACE:	SIZE:	DPR-ACT	OK: X	IRP- ACT:	
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: A	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	***
	IN/A: X	JOK:	IREPLACE.	SIZE.	DFR-ACT	<u> </u>		
COMMENTS:							DPR-ACT = Dampe	
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:		10.07	1	1				
GOWNVILIN I G.								
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
NLET VANES	N/A: X	OK:	COMMENTS:			#*************************************		
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN				
COMMENTS:		INCI DAGE		JOCIMINET				
COMMEN 19.								
							-	
	IN/A·	IOK: X	ICLEAN	ISIZE: 1"	CNTLVLV	lok:	RP- ACT:X	IRP-BD:X
COOLING COIL	N/A: N/A:	OK: X	CLEAN	SIZE: 1"	CNTLVLV CNTLVLV	OK: OK: X	RP- ACT:X	RP-BD:X
COOLING COIL HEATING COIL	N/A:	OK: X	CLEAN	SIZE:		11		
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: X		i		CNTLVLV	ок: х	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A:	OK: X	CLEAN REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: X	OK: X	CLEAN REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	CLEAN REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	CLEAN REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X	OK: X	CLEAN REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X OK: OK:	CLEAN REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	CLEAN REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK:	CLEAN REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	CLEAN REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	CLEAN REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	CLEAN REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace 6	RP-BD: RP-BD: RP-BD: Actuator

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 12 Nov-94

CHECKED BY:

CWW AJN

BLDG:

227

FILE:

ASB-WCT = Absorption w/ Water Side Cooling Tower	### REPLACE: SIZE: SHP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP  CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE:
C-WCT = Centrifugal w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower ACCU = Air Cooled Condensing Unit  COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS:  140  COOLING TOWER N/A: OK: X REPLACE: SIZE: COMMENTS:  CHILLER INSUL. N/A: OK: X REPLACE: SIZE: COMMENTS:  CHILLER INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY: COMMENTS:  CHILLER INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: COMMENTS:  CHILLER INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: COMMENTS:  CHILLER INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: COMMENTS:  CHILLER INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: COMMENTS:  CHILLER INSUL. N/A: OK: X REPLACE: SIZE: 3 HP CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SE	WCT = Centrifugal w/ Water Side Cooling Tower WCT = Reciprocating w/ Water Side Cooling Tower WCT = Reciprocating w/ Water Side Cooling Tower CCU = Air Cooled Condensing Unit COMP, MOTOR N/A: OK: X REPLACE: SIZE: COMP, MOTOR N/A: OK: X REPLACE: SIZE: COMP, MOTOR N/A: OK: X REPLACE: SIZE: COMP, MOTOR N/A: OK: X REPLACE: SIZE: COMP, MOTOR N/A: OK: X REPLACE: SIZE: COMP, MOTOR N/A: OK: X REPLACE: SIZE: COMP, MOTOR N/A: OK: X REPLACE: SIZE: COMP, MOTOR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: SIZE: 5 HP CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: SIZE: MMENTS: 140  SOLING TOWER N/A: OK: X REPLACE: SIZE: SIZE: MMENTS:  MILLER INSUL. N/A: OK: X REPLACE: SIZE: SIZE: MMENTS:  MILLER INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY: 6 @ 4*  MIMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: S
ASB-WCT = Absorption w/ Water Side Cooling Tower	WCT = Reciprocating w/ Water Side Cooling Tower   CT = Cooling Tower   CT = Absorption w/ Water Side Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = Cooling Tower   CT = COOLING Tower   N/A:
CCU = Air Cooled Condensing Unit	CCU = Air Cooled Condensing Unit   CT = Cooling Tower
COMP. MOTOR   N/A:   OK: X   REPLACE:   SIZE:	COMP. MOTOR   N/A:   OK:   X   REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK:   X   REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK:   REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK:   REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK:   REPLACE:   SIZE:
COMP. MOTOR         N/A:         OK:         X         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:         5 HP           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:         5 HP           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:         5 HP           COMMENTS:         140         OK:         X         REPLACE:         SIZE:           COMMENTS:         N/A:         OK:         X         REPLACE:         SIZE:           CHILLER INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:         6' @ 4'           CHW PIPE INSUL.         N/A:         OK:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           CHW PUMP MOTOR         N/A:         OK:         X         REPLACE:         SIZE:         3 HP           CHW PUMP MOTOR         N/A:         OK:         X         REPLACE:         SIZE: <td>  COMP. MOTOR   N/A:   OK:   X   REPLACE:   SIZE:    </td>	COMP. MOTOR   N/A:   OK:   X   REPLACE:   SIZE:
COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:         5 HP           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:         5 HP           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:           COMMENTS:         140         SIZE:         SIZE:           COOLING TOWER         N/A:         OK:         X         REPLACE:         SIZE:           COMMENTS:         SIZE:         SIZE:         CHILLER INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:         G* @ 4*           CHW PIPE INSUL.         N/A:         OK:         MISSING:         X         ESTIMATED QUANTITY:         G* @ 4*           COMMENTS:         CHW PUMP MOTOR         N/A:         OK:         X         REPLACE:         SIZE:         3 HP           CHW PUMP SEALS         N/A:         OK:         X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         X	COMP. MOTOR
COMP. MOTOR	COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:         5 HP           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:         5 HP           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:           DMMENTS:         140         SIZE:         SIZE:           DOLING TOWER         N/A:         OK:         X         REPLACE:         SIZE:           MENDAMENTS:         N/A:         OK:         X         REPLACE:         SIZE:           MILLER INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MENTAL INCLEDITIONAL DIVIDITY:         N/A:         OK:         X         REPLACE:         SIZE:         3 HP           CHW PUMP MOTOR         N/A:         OK:
CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: 5 HP CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS:  140  COOLING TOWER N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: OK: X MISSING: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: COMMENTS:  CHILDER INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: OMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR  N/A:  OK: X  REPLACE:  SIZE: 5 HP  CT/ACCU FAN MTR  N/A:  OK: X  REPLACE:  SIZE: 5 HP  CT/ACCU FAN MTR  N/A:  OK: X  REPLACE:  SIZE: 5 HP  CT/ACCU FAN MTR  N/A:  OK: X  REPLACE:  SIZE:  MMENTS:  MMENTS:  140  OULING TOWER  N/A:  OK: X  REPLACE:  SIZE:  MMENTS:  MMENTS:  MMENTS:  MMENTS:  MILLER INSUL.  N/A:  OK: X  MISSING:  ESTIMATED QUANTITY:  WPIPE INSUL.  N/A:  OK: MISSING: X  ESTIMATED QUANTITY:  OMMENTS:  MMENTS:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:
CT/ACCU FAN MTR         N/A:         OK: X         REPLACE:         SIZE:         5 HP           CT/ACCU FAN MTR         N/A:         OK: X         REPLACE:         SIZE:           COMMENTS:         140           COOLING TOWER         N/A:         OK: X         REPLACE:         SIZE:           AIR COOLED COND.         N/A:         OK: X         REPLACE:         SIZE:           COMMENTS:         COMMENTS:         ESTIMATED QUANTITY:         6'@ 4"           CHW PIPE INSUL.         N/A:         OK: MISSING: X         ESTIMATED QUANTITY:         6'@ 4"           COMMENTS:         COMMENTS:         SIZE: 3 HP         CHW PUMP MOTOR         N/A: OK: X         REPLACE: SIZE:         SIZE: 3 HP           CHW PUMP SEALS         N/A: OK: X         REPLACE: SIZE:         SIZE:         CHW PUMP SEALS         N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:         5 HP           CT/ACCU FAN MTR         N/A:         OK:         X         REPLACE:         SIZE:           MMENTS:         140           DOLING TOWER         N/A:         OK:         X         REPLACE:         SIZE:           R COOLED COND.         N/A:         OK:         X         REPLACE:         SIZE:           MMENTS:         MILLER INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MMENTS:         MMENTS:         MISSING:         X         ESTIMATED QUANTITY:         6' @ 4'           MMENTS
COMMENTS: 140  COOLING TOWER N/A: OK: X REPLACE: SIZE:  AIR COOLED COND. N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 6' @ 4"  COMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR
COMMENTS: 140  COOLING TOWER   N/A:   OK: X   REPLACE:   SIZE:   AIR COOLED COND.   N/A:   OK: X   REPLACE:   SIZE:   COMMENTS:	DOLING TOWER   N/A:   OK: X   REPLACE:   SIZE:   R COOLED COND.   N/A:   OK: X   REPLACE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   MMENTS:   SIZE:   SIZE
COOLING TOWER   N/A:   OK: X   REPLACE:   SIZE:   AIR COOLED COND.   N/A:   OK: X   REPLACE:   SIZE:   COMMENTS:  CHILLER INSUL.   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   MISSING: X   ESTIMATED QUANTITY:   COMMENTS:  CHW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   3 HP   CHW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   OK:   OK:   OK:	DOLING TOWER N/A: OK: X REPLACE: SIZE:  R COOLED COND. N/A: OK: X REPLACE: SIZE:  MMENTS:  MILLER INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY:  MY PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY:  MY PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 6'@ 4"  MMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:
AIR COOLED COND.  N/A:  OK: X  REPLACE:  SIZE:  COMMENTS:  CHILLER INSUL.  N/A:  OK: X  MISSING:  ESTIMATED QUANTITY:  6' @ 4"  COMMENTS:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  3 HP  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:	R COOLED COND.  N/A:  OK: X  REPLACE:  SIZE:  MMENTS:  MISSING:  ESTIMATED QUANTITY:  N/A:  OK: MISSING: X  ESTIMATED QUANTITY:  6' @ 4"  MMENTS:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  3 HP  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  SIZE:  S
AIR COOLED COND.  N/A:  OK: X  REPLACE:  SIZE:  COMMENTS:  CHILLER INSUL.  N/A:  OK: X  MISSING:  ESTIMATED QUANTITY:  6' @ 4"  COMMENTS:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  3 HP  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:	R COOLED COND.  N/A:  OK: X  REPLACE:  SIZE:  MMENTS:  MISSING:  ESTIMATED QUANTITY:  N/A:  OK: MISSING: X  ESTIMATED QUANTITY:  6' @ 4"  MMENTS:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  3 HP  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  SIZE:  S
CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: MISSING: X ESTIMATED QUANTITY: 6' @ 4"  COMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	MMENTS:  HILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: HW PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: HW PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 6' @ 4'  OMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:
CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 6' @ 4"  COMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	HILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  WY PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 6' @ 4'  MMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:
CHW PIPE INSUL.  N/A:  OK:  MISSING: X  ESTIMATED QUANTITY:  6' @ 4"  COMMENTS:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:	W PIPE INSUL.  N/A: OK: MISSING: X ESTIMATED QUANTITY: 6' @ 4'  MMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:
CHW PIPE INSUL.  N/A:  OK:  MISSING: X  ESTIMATED QUANTITY:  6' @ 4"  COMMENTS:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:	W PIPE INSUL.  N/A: OK: MISSING: X ESTIMATED QUANTITY: 6' @ 4'  MMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:
COMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	OMMENTS:           CHW PUMP MOTOR         N/A:         OK:         X         REPLACE:         SIZE:         3 HP           CHW PUMP SEALS         N/A:         OK:         X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:
CHW PUMP SEALS         N/A:         OK: X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP SEALS         N/A:         OK:         X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:
CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:
CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:
	CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:
	CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:
	CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:
	CHW PUMP SEALS N/A: OK: REPLACE: SIZE:
	MMENTS: DIMPUNINGULATED

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

227

FILE: 227.XLS

BOILER/CONVERTER NO.		BLR-1	LOCATION (RM)	WEST MER	
BOILER TYPE:		STM	MFG.: KEWA	NEE MODEL: TYPE C	*
CONVERTER TYPE:			MFG.:	MODEL:	
STM - Steam	STM/HW	- Steam to Ho	t Water Conv.	HTHW/STM - High Temp HW to Steam Conve	ertor
HW - Hot Water	HTHW/HV	V - High Tem	o. HW to HW Cv.	DHW - Domestic Hot Water Convertor	
BOILER BURNER	ATMOSPI	HERIC:	POWER: X	OK: X REPLACE:	
COMMENTS:	CONVER	TED COAL B	OILER		
180					
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:			W. 1.4.		
BLR INSULATION	N/A:	JOK: X	MISSING:	JESTIMATED QUANTITY:	
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:	JĽ ^{N/}	JOIN. A	IMIOOIIVO.	LOTRINIED GOMMINI	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
CV INSULATION			MISSING:	ESTIMATED QUANTITY:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

227

FILE:

BOILER/CONVERTER NO		BLR-2	LOCATION (RM)	EAST MER		
BOILER TYPE:		STM	MFG.: KEWANEE		MODEL:	TYPE C
CONVERTER TYPE:			MFG.:		MODEL:	
STM - Steam	STM/HW	- Steam to Ho	ot Water Conv.	HTHW/STM	1 - High Tem	np HW to Steam Converto
HW - Hot Water	HTHW/HV	W - High Tem	p. HW to HW Cv.			ater Convertor
BOILER BURNER	ATMOSPI	HERIC:	POWER: X	OK:	X	REPLACE:
COMMENTS:	BOILER I	S NOT ON				
DID DIMO MOTOR	Thurs se	Tov	Inch toc	Tours		
BLR PUMP MOTOR BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
	N/A: X	ОК:	REPLACE:	SIZE:		
COMMENTS:						
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATE	OLIANTIT	V·
PIPE INSULATION	IIN/A·	IOK: X	IMISSING:	TECTIMANTE	J ULIVNITIT	γ,
PIPE INSULATION COMMENTS:	N/A:	OK: X	MISSING:	ESTIMATE	O QUANTIT	Υ:
	N/A: X N/A: X	OK: X	REPLACE:	SIZE:	O QUANTIT	Υ:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X N/A: X	ОК: ОК: ОК:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	O QUANTIT	Υ:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X	ОК:   ОК:   ОК:   ОК:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Υ.
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Υ:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Y:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Υ.
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Υ:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Y:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Υ.
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Y:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Y:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Y:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Y:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	O QUANTIT	Y:
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:		
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK:   OK:   OK:   OK:   OK:   OK:   OK:   OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	D QUANTIT	Y:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 0402 BLDG NAME: ENL BARRACKS W/AS

ELECTRIC METER: N

CONDITIONED SQFT:

35,718

GAS METER:

SUSPECT ACM: N

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

FRI: SAT: SUN: MON: TUE: WED: THUR: 0 0 0 0 0 0 0 PRES START: 24 24 24 24 24 24 24 PRES STOP: 0 0 0 0 0 REQ START: 0 0 24 24 24 24 24 24 REQ STOP:

### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/12/94 PREPARED BY: JM

AIR HANDI	LING UNIT SURVEY OBSERVATIONS
BUILDING NUMBER: 0402 AHU NUMBER: AHU	
REFRIG SYS # SRVNG AHU: CH	H-1 SERVES AREA: 1ST AND 2ND WEST  % OF BLDG AREA HEATED: 40
AHU UNIT TYPE MULTI ZONE	NUMBER OF ZONES IF MZ UNIT: 5
CFM-HTG: MIN %OA:	9,325
NAMEPLATE	
UNIT MFG: N/A SUPPLY FAN HP: SUPPLY FAN MTR MFG: MARA SUPPLY FAN MTR MODEL: BVD21 COMMENTS:	UNIT MODEL:  7.5 RET/EXH FAN HP: 0  THON RET/EXH FAN MTR MFG:  3TTDR7359 RET/EXH FAN MTR MODEL:
COILS	
PREHEAT COIL: NONE HEATING COIL: STEAM REHEAT COIL: NONE HUMIDIFIER: NONE COOLING COIL: CW	
DAY SCHEDULE NO: 10 SCHEDULE COMMENTS:	MONTH SCHEDULE NO: 3
SUN:         MON:           PRES START:         0         0           PRES STOP:         24         24           REQ START:         0         0           REQ STOP:         24         24	TUE:         WED:         THUR:         FRI:         SAT:           0         0         0         0           24         24         24         24           0         0         0         0           24         24         24         24
MONTHS JAN: FEB: MAR: ON:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
	PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 90
PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC:	90 COLD DECK DEG F: 90  MIXED AIR DEG F: 61
PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MAX OA DMPR CONTROL: Y RET AIR DMPR CONTROL: Y EXH AIR DMPR CONTROL: Y	MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N ECONOMIZER DB CONTROL: N TIME CLOCK: N ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N
OTHER CONTROLS DESCR: CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING NUMBER:			
AHU NUMBER:	<b>0402</b> AHU-2	AHU LOCATION: 2ND FLR MER W&E	
		\$ 100 mm 1 mm 1 mm 1 mm 1 mm 1 mm 1 mm 1	
REFRIG SYS # SRVNG AHU:		SERVES AREA: 1ST & 2ND EAST	
	% OF BLD	G AREA HEATED: 50	_
AHU UNIT TYPE MULTI ZO	DNE	NUMBER OF ZONES IF MZ UNIT: 5	
CFM-HTG:	11,800	CFM-CLG: 11,800	
MIN %OA:	10	MAX %OA: 100	
NAMEPLATE			
UNIT MFG: N	/A	UNIT MODEL:	<del> · · · - ·</del>
SUPPLY FAN HP:	5	RET/EXH FAN HP: 0	
	ARATHON	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	A A American Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Community Com	RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: N	ONE		
	TEAM		
REHEAT COIL: N	ONE		
HUMIDIFIER: N	ONE		
COOLING COIL: C	W		
SCHEDULE			
DAY SCHEDULE NO:	10	MONTH SCHEDULE NO: 3	
SCHEDULE COMMENTS:		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	
SUN: M	ON: TUE: WED: T	HUR: FRI: SAT:	
PRES START: 0	ON: TUE: WED: T	HUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0	
PRES START: 0 PRES STOP: 24	0 0 0 24 24 24	0 0 0 24 24 24	
PRES START:         0           PRES STOP:         24           REQ START:         0           REQ STOP:         24	0     0       24     24       0     0       24     24       24     24	0     0       24     24       0     0       24     24       24     24	
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:	0 0 0 24 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 24 24 24 24 0 0 0 0 24 24 24 24 : JUL: AUG: SEP: OCT: NOV: DEC:	
PRES START:         0           PRES STOP:         24           REQ START:         0           REQ STOP:         24    MONTHS JAN: FEB: MA	0 0 0 24 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0     0       24     24       0     0       24     24       24     24	
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:	0 0 0 24 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 24 24 24 24 0 0 0 0 24 24 24 24 : JUL: AUG: SEP: OCT: NOV: DEC:	
PRES START:         0           PRES STOP:         24           REQ START:         0           REQ STOP:         24    MONTHS JAN: FEB: MA ON:	0 0 0 0 24 24 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 24 24 24 0 0 0 0 0 0 0 0 0 0 0 0	•
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:   CONTROLS	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 24 24 24 0 0 0 0 0 0 0 0 0 0 0 0	
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:   CONTROLS  TYPE OF CONTRO	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:   CONTROLS  TYPE OF CONTRO PRESENT TEMP WINTR OPRESENT TEMP WINTR UNO	0	0 0 0 0 24 24 24 0 0 0 0 0 0 0 0 0 0 0 0	t
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:   CONTROLS  TYPE OF CONTRO PRESENT TEMP WINTR O	O	0	1
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:   CONTROLS  TYPE OF CONTRO  PRESENT TEMP WINTR O PRESENT TEMP WINTR UNO PRESENT TEMP SUM O	O	0	LS? N
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:	0	0 0 0 24 24 24 24 0 0 0 24 24 24  : JUL: AUG: SEP: OCT: NOV: DEC:  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	_
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:	0	0	ck: N
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:	O	0	ck: N
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: MA ON:	O	0	ck: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/12/94
PREPARED BY: JM

BUILDING NUMBEI AHU NUMBEI		AHILLOCATION	N: BASEMENT MER
		_ AND LOCATION	. BASEIVIENT MEN
REFRIG SYS # SRVNG A	·		BASEMENT NORTH
	% OF	BLDG AREA HEATED:	10
AHU UNIT TYPE SING	LE ZONE	NL	JMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	1,300	CFM-CLG:	1,300
MIN %OA:	25	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UN	IT MODEL:
SUPPLY FAN HP:	3		H FAN HP: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN	MTR MFG:
SUPPLY FAN MTR MODEL:		RET/EXH FAN MT	R MODEL:
COMMENTS:			
COILS			
Coil	Coil Type	Modulating	Valve?
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE	<u> </u>	
COOLING COIL:	CW	$\boxtimes$	
SCHEDULE			
DAY SCHEDULE NO:	10		MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI:	SAT:
PRES START: 0	0 0 0	0 0	0
PRES STOP: 24	24 24 24	24 24	24
REQ START: 0	0 0 0		0
REQ STOP: 24	24 24 24	24 24	24
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	TROLS: PNEUMATIC	TUEDM	IOSTAT TYPE: SINGLE SETPOINT
		НОТ	DECK DEG F: 0
PRESENT TEMP WINTI		COLD	DECK DEG F: 0
PRESENT TEMP WINTRU	NOCC:	MIXE	ED AIR DEG F: 0
PRESENT TEMP SUI	M OCC:	0 OTHER SETPO	DINT DESCRIP:
PRESENT TEMP SUM U	NOCC:	0 OTHER SET	POINT DEG F: 0
MIN OA DMPR CONTROL	L: N MIXED AIR D	MPR CONTROL: Y	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL	L: Y ECONOMIZE	R DB CONTROL: Y	TIME CLOCK:
RET AIR DMPR CONTROL	L: Y ECONOMIZEI	R WB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL	L: Y		
OTHER CONTROLS	DESCR:		
CONTROLS COMM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: JM

BUILDING NUM	IBER: 04	102				BOILER	RM LOCA	ATION:	BASEME	ENT	
BOILER UN	ΙT										
			BLR/CON	VERTER SE	ERVES AR	EA OR S	ERVICE:				
SOURCE OF BI	LDG HEA	Τ									
BOILER	2					ONVERT	ER				
BOILER		R-1			CON	IVERTER	R TAG: 🖠				_
BOILER T	YPE: ME	ED PRESS	STEAM (15	# TO 125#)		VERTER	-				
FUEL T	TYPE: NA	AT. GAS			CON	V HT SO	URCE:				
CENTRAL F	PLANT DII	RECT									
IAMEPLAT	E			9,	% AREA HE	ATED B	Y BB RAI	DIATION:			0
BOILER MFG: BI	JRNHAM				BLR C	AP OUT	PUT (BTU	н):		2,102,000	
	_60GPF						РИТ (ВТИ			2,627,500	
COMMENTS:											
COMMENTS.											
CHEDULE											
	- NO:	10					A&ONT.	I SECHD	HENO		1
DAYS SCHEDULI CHEDULE COMME							WONT	TOLOND	OLL NO	•	<u>-</u>
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				-
PRES START:	0	0	0	0	0 =	0	0				
PRES STOP:	24	24	24	24	24		24				
REQ START:	0	0	= 0	24	0 =	0 	24				
REQ STOP:	24	24	24		24		24				_
MONTHS JAN:	FEB:	MAR:	APR: I	MAY: JU	N: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-
ON:	$\boxtimes$							$\boxtimes$	$\boxtimes$	$\boxtimes$	_
CONTROLS											
TYPE OF E	BLR CON	TROLS:	ELECTR	IC			RESE	T CONTR	ROLS: [	N	
OPERA	TING SET	POINT:		10 DEG	F or PSIG						
TYPE OF BURN	NER CONT	TROLS:									
CONTRO	LS COM	MENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

EMC NO: 1406-001

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0402	2	BLDG NAME:	ENL BARRACKS W/AS	
REF. UNIT NUMBER/TAC	G: CH-1	nama.	LOCATION (MER#	): OUTSIDE
			AHU'S SERVE	·
UNI	T TYPE AIR COOLED	CONDENSING U	INIT W/ CHW	
NAMEPLATE	-			
CHILLER MFG:	BOHN		TOWER MFG:	
CHILLER MODEL:	ACWC47D	, #	OF TOWER FANS:	2
CHILLER SERIAL NO:	BCH8160		TOWER FAN V:	208
CHILLER V:	208	Ţ	OWER FAN AMPS:	100
CHILLER AMPS:	100	 =	TOWER FAN HP:	5
CHILLER PH:	0	<u>.</u>		
CHILLER CAP (TONS):	65	-		
COMMENTS:				
SCHEDULE				
DAYS SCHEDULE	E NO: 10		MONTHS SCHEDULE N	10: 2
SCHEDULE COMME	Transmission and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second se			
SUN	N: MON: TUE:	WED: THUR:	FRI: SAT:	,
	0 0	0 0		
	24 24 24	24 24		
	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	0 0 24 24		:
REQUIOF. 2	.4	24 24	24 24	
MONTHS JAN: FEB	: MAR: APR: MA	AY: JUN: J	UL: AUG: SEP: C	OCT: NOV: DEC:
ON:				
CONTROLS				
TYPE OF CONT	ROLS: ELECTRIC			
CWS SET	POINT:	0	CNWS SETPOINT:	0
CWR SET	POINT:	0	CNWR SETPOINT:	0
PRESS L	ITE HI: N	TEMP LITE HI:	N OTHER INDICA	TIODS
PRESS LITE				nors.
PRESS GA		MP GAUGES:	N L	
CONTROLS CO		OAUGLU.		
CW and CNW P	<u></u>			
PUMP TAG: 1	PUMP HP:	1.5	PUMP MFG: M	ARATHON
	MP (Chilled Water)	1.5	PUMP MODEL:	110111011
			<u> </u>	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

402

FILE:

ALIEL NICH	AHU-2	LOCATIO	G UNIT - HVAC L	2ND FLOOR M				
AHU NO.:	MZ-5	MFG.:	1 (Kill) 3001F	ZND I LOOK IV	MODEL:	·		
AHU TYPE:		ting & Vntltng	. EC E	n Coil (Indicate :		AD for A Dine	2)	
SZ - Single Zone		aing & vniing iable Air Vol.	,	Reheat System	2F 101 2 FIPE 01	4F 101 4 F1pt	7)	
MZ - Mulitzone	UH - Unit			duction System				
DD - Dual Duct			REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER F. & B. DAMPER	N/A: N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
			INEPLACE.	JOIZE.	DFR-ACT	JON. A		
COMMENTS:	RA & OA I	LINNED					DPR-ACT = Damp	
							RP-ACT = Replace	e Actuator
FILTER SECTION	IN/A:	JOK: X	[REPLACE:	SIZE:				
	IN/A:	JON: X	INEPLACE.	JOILE.				
COMMENTS:	SIMILAR	TO 227				-		
CURRLY AIR FAN	***************************************		FAN BEARINGS:	ICOMMEN	ITC:			
SUPPLY AIR FAN	OK: X					MADATU	NE HD	
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	115:	MARATH	JN 5 HP	
INLET VANES	N/A: X	OK:	COMMENTS:	100,445				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN		N/A		
RETURN FAN MOTOR	OK:	REPLACE	:	COMMEN	ITS:			
	<u></u>							
COMMENTS:						Taxons.		lee se
COMMENTS:	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	(NONE)	RP- ACT:	
COMMENTS:  COOLING COIL HEATING COIL	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A: X	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT:	RP-BD:
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	N/A: N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A: X N/A: X	OK: X	REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	N/A: N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	N/A: N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  COMMENTS:	N/A: N/A: N/A: X N/A: X AHU-1 IS	OK: X OK: OK: THE SAME A	REPLACE: REPLACE: REPLACE: S AHU-2	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  COMMENTS:  AHU PUMP MOTOR	N/A: N/A: N/A: X N/A: X AHU-1 IS	OK: X OK: OK: THE SAME A	REPLACE: REPLACE: S AHU-2 REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X N/A: X AHU-1 IS	OK: X OK: OK: THE SAME A	REPLACE: REPLACE: REPLACE: S AHU-2	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X N/A: X AHU-1 IS	OK: X OK: OK: THE SAME A	REPLACE: REPLACE: S AHU-2 REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X N/A: X AHU-1 IS	OK: X OK: OK: THE SAME A	REPLACE: REPLACE: S AHU-2 REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: X N/A: X AHU-1 IS	OK: X OK: OK: THE SAME A OK: OK:	REPLACE: REPLACE: S AHU-2  REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: X N/A: X N/A: X AHU-1 IS N/A: X N/A: X	OK: X OK: OK: THE SAME A OK: OK: OK:	REPLACE: REPLACE: S AHU-2  REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV  CNTLVLY	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: X N/A: X AHU-1 IS	OK: X OK: OK: THE SAME A OK: OK:	REPLACE: REPLACE: S AHU-2  REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: X N/A: X N/A: X AHU-1 IS N/A: X N/A: X	OK: X OK: OK: THE SAME A OK: OK: OK:	REPLACE: REPLACE: S AHU-2  REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV  CNTLVLY	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

AJN AJN

BLDG:

402

FILE:

CHECKED BY: 402.XLS

	AIR I	HANDLIN	G UNIT - HVAC	<b>UPGRADE O</b>	BSERVA'	TIONS		
AHU NO.:	AHU-4	LOCATIO	N (Rm) BASE	MENT				
AHU TYPE:	SZ	MFG.:	· · · · · · · · · · · · · · · · · · ·		MODEL:			
SZ - Single Zone	H&V - He	ating & Vntltng	FC - F	an Coil (Indicate 2F		4P for 4 Pi	pe)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT -	Reheat System	,		. ,	
DD - Dual Duct	UH - Unit	Heater	IND -	Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	OA & RA	INTERLOCKE	D				DPR-ACT = Damp	er Actuator
		4					RP-ACT = Replace	e Actuator
FILTER SECTION	N/A:	IOK: X	REPLACE:	SIZE:	· · · · · · · · · · · · · · · · · · ·			
COMMENTS:	INA.	JON. A	IUCI PAGE:	SIZE.				
OOMINICIA LO			W					
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMENT	S:	3/4 HP N	MARATHON	
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMENT				
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMENT	S:	N/A		WWW
RETURN FAN MOTOR	OK:	REPLACE		COMMENT		1477		
					J.			
			DN IN HALLWAYS & B.		J.			
					J.			
COMMENTS:		ER RADIATIO	ON IN HALLWAYS & B.	ASEMENT		Nok:	IRP- ACT:	IRP-BD
COMMENTS:	PERIMET			ASEMENT    SIZE:1-1/2*	CNTLVLV	OK:	RP- ACT:	
COMMENTS:  COOLING COIL HEATING COIL	PERIMET	ER RADIATIO	ON IN HALLWAYS & B.	ASEMENT		OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL	PERIMET  N/A:  N/A:	OK: X	REPLACE:	ASEMENT  SIZE:1-1/2"  SIZE:	CNTLVLV CNTLVLV		RP- ACT:	RP-BD:
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	PERIMET  N/A:  N/A:  N/A:	OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK:	RP- ACT: RP- ACT:	RP-BD:
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	PERIMET  N/A:  N/A:  N/A:	OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	PERIMET  N/A:  N/A:  N/A:	OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	PERIMET  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:1-1/2" SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR	PERIMET  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace RP-BD = Replace I	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:1-1/2" SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace RP-BD = Replace I	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace RP-BD = Replace I	RP-BD: RP-BD: RP-BD:
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace RP-BD = Replace I	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: PUMP UN	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:1-1/2" SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV 1.5 MARAT RUSTED, C	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace RP-BD = Replace I	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION DUCT INSULATION	N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:1-1/2" SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace RP-BD = Replace I	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

LOCATION, FT. RILET, N	A110A0					3,,20,,20		, 101
			BLDG:	402		FILE:	402.XLS	
ı	REFRIGE	RATION E	QUIPME	NT - HVAC UPO	RADE OBS	ERVATION	NS	
CHILLER / EQUIP. NO.		CH-1	LOCATION		IDE NORTH OF B			
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	BOHN	MODEL:	VRB0655B		
C-WCT = Centrifugal w/ V	Vater Side Co	ooling Tower		R-ACCU = Reciprod	ating w/ Air Coole	d Condensing	Unit	
R-WCT = Reciprocating w	/ Water Side	Cooling Tower		ASB-WCT = Absorp	ition w/ Water Side	e Cooling Towe	er	
ACCU = Air Cooled Cond	ensing Unit			CT = Cooling Tower	-			
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:				
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:				
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:				
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:				
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:				
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:				
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:				
COMMENTS:	5 HP FAN							
1.00	2 - 30 HP	COMPRESSO						
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:				
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
					······································			
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIN	MATED QUANTITY	Y:		
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIN	MATED QUANTITY	Y:		
COMMENTS:		<del></del>						
			wee					
		***						
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			**************************************	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SiZE:				
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
		,						
<u> </u>								
						······································		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

402

FILE:

HW - Hot Water HTHW/HW - BOILER BURNER ATMOSPHE COMMENTS: NEWER LO GAS METER BLR PUMP MOTOR N/A: X BLR PUMP SEALS N/A: X COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A:	- High Tem; ERIC: OKING BO	MFG.: ot Water Conv. p. HW to HW Cv. POWER:	BURNHAM		mestic Hot W	ater Convert	eam Convertor	
CONVERTER TYPE:  STM - Steam  HW - Hot Water  BOILER BURNER  COMMENTS:  BLR PUMP MOTOR  BLR PUMP SEALS  COMMENTS:  BLR INSULATION  N/A:  N/A:  N/A:  N/A:  N/A:	Steam to Ho - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - High Temper - Hi	MFG.: of Water Conv. p. HW to HW Cv. POWER: ILER REPLACE: REPLACE:	X	SIZE:	MODEL:  M - High Terr mestic Hot W X	np HW to Ste later Convert REPLAC	eam Convertor	,
STM - Steam STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW - STM/HW -	- High Temi ERIC: OKING BO R OK: OK:	ot Water Conv. p. HW to HW Cv. POWER:  REPLACE: REPLACE:		SIZE:	M - High Tem mestic Hot W X	ater Convert	or	
HW - Hot Water HTHW/HW - BOILER BURNER ATMOSPHE COMMENTS: NEWER LO GAS METER  BLR PUMP MOTOR N/A: X BLR PUMP SEALS N/A: X  COMMENTS:  BLR INSULATION N/A: PIPE INSULATION N/A:	- High Temi ERIC: OKING BO R OK: OK:	P. HW to HW Cv.    POWER: > > >		SIZE:	mestic Hot W	ater Convert	or	
BOILER BURNER ATMOSPHE COMMENTS: NEWER LO GAS METER  BLR PUMP MOTOR N/A: X BLR PUMP SEALS N/A: X  COMMENTS:  BLR INSULATION N/A: PIPE INSULATION N/A:	ERIC: OKING BO R OK: OK:	POWER: ) ILER  REPLACE: REPLACE:		SIZE:	X	REPLAC		
COMMENTS:  NEWER LOGAS METER  BLR PUMP MOTOR  BLR PUMP SEALS  N/A: X  COMMENTS:  BLR INSULATION  N/A:  PIPE INSULATION  N/A:	OKING BO R OK: OK:	REPLACE: REPLACE: MISSING:		SIZE:  SIZE:			E:	
GAS METER  BLR PUMP MOTOR N/A: X  BLR PUMP SEALS N/A: X  COMMENTS:  BLR INSULATION N/A:  PIPE INSULATION N/A:	OK: OK:	REPLACE: REPLACE:		SIZE:		V		
BLR PUMP MOTOR N/A: X BLR PUMP SEALS N/A: X COMMENTS: BLR INSULATION N/A:	OK: OK: X	REPLACE:  MISSING:		SIZE:		V.		
BLR PUMP SEALS N/A: X  COMMENTS:  BLR INSULATION N/A:  PIPE INSULATION N/A:	OK:	REPLACE:  MISSING:		SIZE:	ED QUANTIT	V		
BLR PUMP SEALS N/A: X  COMMENTS:  BLR INSULATION N/A:  PIPE INSULATION N/A:	OK:	REPLACE:  MISSING:		SIZE:	ED QUANTIT	V.		
BLR PUMP SEALS N/A: X  COMMENTS:  BLR INSULATION N/A:  PIPE INSULATION N/A:	OK:	REPLACE:  MISSING:		SIZE:		W		
COMMENTS:  BLR INSULATION   N/A:  PIPE INSULATION   N/A:	OK: X	MISSING:			ED QUALITY	V		
BLR INSULATION N/A: PIPE INSULATION N/A:				ESTIMAT	ED QUANTIT	V.		
PIPE INSULATION N/A:				ESTIMAT		V.		
PIPE INSULATION N/A:				ESTIMAT	ED OLIANITIE	V.		
PIPE INSULATION N/A:					EU QUANTII	1.		
			X	<b>I</b> ESTIMAT	ED QUANTIT		15' @ 6"	
OOMALITO.			·	1				
HW PUMP MOTOR N/A: X HW PUMP SEALS N/A: X	OK:	REPLACE:		SIZE:				
HW PUMP MOTOR N/A: X	IOK:	REPLACE:		SIZE:				
HW PUMP SEALS N/A: X	OK:	REPLACE:		SIZE:				
HW PUMP MOTOR IN/A: X	OK:	REPLACE:		SIZE:				
HW PUMP SEALS N/A: X	OK:	REPLACE:		SIZE:				
HW PUMP MOTOR N/A: X	ОК:	REPLACE:		SIZE:				
HW PUMP SEALS N/A: X	OK:	REPLACE:	****	SIZE:				
COMMENTS:								
								-
CV PUMP MOTOR N/A: X	OK:	REPLACE:		SIZE:				
CV PUMP SEALS N/A: X	OK:	REPLACE:		SIZE:				
COMMENTS:								
CV INSULATION N/A: X	ОК:	MISSING:		1	ED QUANTIT			
CV PIPE INSUL. N/A: X	OK:	MISSING:		ESTIMATI	ED QUANTIT	Y:		
COMMENTS:								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

#### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 0410 BLDG NAME: ENL BARRACKS W/AS

ELECTRIC METER: N

CONDITIONED SQFT:

32,883

GAS METER: N
SUSPECT ACM: N

#### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

SUN: MON: TUE: WED: THUR: FRI: 0 0. 0 PRES START: 0 0 0, PRES STOP: 24 24 24 24 24 24 0 0 0 0 0 0 REQ START: 0 REQ STOP: 24 24 24 24 24 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING NUMBER: 0410 AHU NUMBER: AHU-1
REFRIG SYS # SRVNG AHU: CH-1
NUMBER OF ZONES IF MZ UNIT:   2
AHU UNIT TYPE MULTI ZONE
CFM-HTG:
MIN %OA: 14 MAX %OA: 100  NAMEPLATE  UNIT MFG: N/A UNIT MODEL: N/A SUPPLY FAN HP: 1 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:  COIL Coil Type Modulating Valve?  PREHEAT COIL: NONE
UNIT MFG: N/A UNIT MODEL: N/A SUPPLY FAN HP: 1 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:  COIL COIL Type Modulating Valve?  PREHEAT COIL: NONE
UNIT MFG: N/A UNIT MODEL: N/A SUPPLY FAN HP: 1 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: E143TTDR7350AK RET/EXH FAN MTR MODEL: COMMENTS:  COIL Coil Type Modulating Valve?  PREHEAT COIL: NONE
SUPPLY FAN HP: 1 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: MARATHON RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:  COIL Coil Type Modulating Valve?  PREHEAT COIL: NONE
SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:  COIL Coil Type Modulating Valve?  PREHEAT COIL: HEATING COIL: STEAM REHEAT COIL: NONE HUMIDIFIER: NONE COOLING COIL: CW  SCHEDULE
SUPPLY FAN MTR MODEL:  COMMENTS:  COILS  Coil Coil Type Modulating Valve?  PREHEAT COIL: NONE HEATING COIL: STEAM REHEAT COIL: NONE HUMIDIFIER: NONE COOLING COIL: CW
COILS  Coil Coil Type Modulating Valve?  PREHEAT COIL: NONE
COILS  Coil Coil Type Modulating Valve?  PREHEAT COIL: NONE
Coil Coil Type Modulating Valve?  PREHEAT COIL: NONE  HEATING COIL: STEAM  REHEAT COIL: NONE  HUMIDIFIER: NONE  COOLING COIL: CW
PREHEAT COIL: NONE  HEATING COIL: STEAM  REHEAT COIL: NONE  HUMIDIFIER: NONE  COOLING COIL: CW
HEATING COIL: STEAM  REHEAT COIL: NONE  HUMIDIFIER: NONE  COOLING COIL: CW
HEATING COIL: STEAM  REHEAT COIL: NONE  HUMIDIFIER: NONE  COOLING COIL: CW
REHEAT COIL: NONE
HUMIDIFIER: NONE
COOLING COIL: CW SCHEDULE
SCHEDULE
DAY SCHEDULE NO: 10 MONTH SCHEDULE NO: 3
CCUEDIU E COMMENTO.
SCHEDULE COMMENTS:
SUN: MON: TUE: WED: THUR: FRI: SAT:
PRES START: 0 0 0 0 0 0 0
PRES STOP: 24 24 24 24 24 24 24
REQ START: 0 0 0 0 0 0
REQ STOP: 24 24 24 24 24 24 24
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC: 70. HOT DECK DEG F: 0
PRESENT TEMP WINTR OCC: 70  PRESENT TEMP WINTR UNOCC: 0  COLD DECK DEG F: 0
PRESENT TEMP WINTR OCC: 70 PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 55
PRESENT TEMP WINTR OCC: 70  PRESENT TEMP WINTR UNOCC: 0  COLD DECK DEG F: 0
PRESENT TEMP WINTR OCC: 70 PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 55  PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0 PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0
PRESENT TEMP WINTR OCC: 70 COLD DECK DEG F: 0 MIXED AIR DEG F: 55  PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SET
PRESENT TEMP WINTR OCC: 70  PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 55  PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0  MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTR DAY OA DMPR CONTROL: Y ECONOMIZER DB CONTROL: N TIME CLO
PRESENT TEMP WINTR OCC: 70 COLD DECK DEG F: 0 MIXED AIR DEG F: 55  PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SETPOINT DEG F: 0 OTHER SET

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

**DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING NUMBEI AHU NUMBEI		1	AHU LOCATION	l:		
REFRIG SYS # SRVNG A	HU: CH-1		SERVES AREA: AREA HEATED:	1ST FLR S.E. V	VING 29	
AHU UNIT TYPE MULT	I ZONE		NU	JMBER OF ZON	ES IF MZ UNIT:	2
CFM-HTG: MIN %OA:		,375 14	CFM-CLG: MAX %OA:	1	2,375 100	
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:		7.5 R			0	
Coil	Coil Type	2	Modulating	Valve?		
PREHEAT COIL: HEATING COIL: REHEAT COIL: HUMIDIFIER: COOLING COIL: SCHEDULE	STEAM NONE NONE					
DAY SCHEDULE NO: SCHEDULE COMMENTS:	10			MONTH SCH	EDULE NO:	3
SUN:   PRES START:   0     PRES STOP:   24     REQ START:   0     REQ STOP:   24	MON: TUE:  0 0 24 24 0 0 24 24	0	R: FRI: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 24		
MONTHS JAN: FEB: ON:	MAR: APR:	MAY: JUN:	JUL: AUG:	SEP: OCT:	NOV: DEC:	;
CONTROLS				1		
TYPE OF CON PRESENT TEMP WINT PRESENT TEMP WINTR U	R OCC:	0 0	HOT COLD	MOSTAT TYPE: DECK DEG F: DECK DEG F: DECK DEG F:		O O
PRESENT TEMP SU PRESENT TEMP SUM U		0	OTHER SETPO	DINT DESCRIP: POINT DEG F:		0
MIN OA DMPR CONTRO MAX OA DMPR CONTRO RET AIR DMPR CONTRO EXH AIR DMPR CONTRO	L: Y ECC	ED AIR DMPR C DNOMIZER DB C DNOMIZER WB C	ONTROL: N		DEMAND LIMIT CN TIME C CLOCK OPERATI	LOCK: N
OTHER CONTROLS COM						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING NUMBER		AHU LOCATION: ME	R 2ND FLR	
REFRIG SYS # SRVNG A			AND 2ND FLOR N.W. WING	
KEI KIO 313 # 3KVNO AI		DG AREA HEATED:	29	
AHU UNIT TYPE MULTI	ZONE	NUMBER	R OF ZONES IF MZ UNIT:	4
CFM-HTG:	12,375	CFM-CLG:	12,375	<del></del>
MIN %OA:	14	MAX %OA:	100	
NAMEPLATE				
UNIT MFG:	N/A	UNIT MOE	DEL: N/A	
SUPPLY FAN HP:	7.5	RET/EXH FAN		
SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL:	METHOD IN THE LABOUR STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF T	RET/EXH FAN MTR N		
COMMENTS:	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	RET/EXH FAN MTR MOD	JEL:	
COILS		- 155 - 15 - 15 - 15 - 15 - 15 - 15 - 1		
Coil	Coil Type	Modulating Valve?		
PREHEAT COIL:	NONE			
HEATING COIL:	STEAM	<u> </u>		
REHEAT COIL:	NONE			
HUMIDIFIER: COOLING COIL:	NONE	片		
	OVV	; <b>ப</b>		
SCHEDULE				
DAY SCHEDULE NO: SCHEDULE COMMENTS:	10	10 <b>M</b>	NTH SCHEDULE NO:	3
SUN:	MON: TUE: WED: 1	THUR: FRI: SAT:		
PRES START: 0	0 0 0	0 0 0		
PRES STOP: 24	24 24 24	24 24 24		
REQ START: 0	0 0 0	0 0 0		
REQ STOP: 24	24 24 24	24 24 24		
	MAR: APR: MAY: JUN	: JUL: AUG: SEP:	OCT: NOV: DEC:	
ON:				
CONTROLS				
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTATH HOT DECK		
PRESENT TEMP WINTE		COLD DECK		<u> </u>
PRESENT TEMP WINTR UI	NOCC: 0	MIXED AIR		=
PRESENT TEMP SUN	OCC: 0	OTHER SETPOINT DE	SCRIP:	
PRESENT TEMP SUM UI		OTHER SETPOINT	DEG F:	<u></u>
MIN OA DMPR CONTROL		R CONTROL: Y IMPL	EMENT DEMAND LIMIT CN	TRLS? N
MAX OA DMPR CONTROL			TIME C	
RET AIR DMPR CONTROL EXH AIR DMPR CONTROL		B CONTROL: N	TIME CLOCK OPERATION	DNAL? N
OTHER CONTROLS D				ì

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

7 (17 ( )	,, (11D Z)11 C C (111 : C C		
BUILDING NUMBE	A STATE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PAR	AHU LOCATION: BASEMENT	
AHU NUMBE	.R: UH-1		
REFRIG SYS # SRVNG A		SERVES AREA: BSMT N.W. WIN	
	% OF BLDG	S AREA HEATED:	8
AHU UNIT TYPE UNIT	HEATER	NUMBER OF ZONE	S IF MZ UNIT: 0
CFM-HTG	: 1,260	CFM-CLG:	0
MIN %OA		MAX %OA:	0
NAMEPLATE			
UNIT MFG	: N/A	UNIT MODEL: N/A	
SUPPLY FAN HP		RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG		RET/EXH FAN MTR MFG:	A CONTRACTOR OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF TH
SUPPLY FAN MTR MODEL		RET/EXH FAN MTR MODEL:	
COMMENTS			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL	: NONE		
HEATING COIL			
REHEAT COIL			
HUMIDIFIER	Fr		
COOLING COIL	: NONE		
SCHEDULE			
DAY SCHEDULE NO:	10	MONTH SCHE	DULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: TH	IUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	0 0 0	0 0 0	
REQ STOP: 24	24 24 24	24 24 24	4
MONTHS JAN: FEB:	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF COM	NTROLS: ELECTRIC	THERMOSTAT TYPE:	
		HOT DECK DEG F:	0
PRESENT TEMP WIN' PRESENT TEMP WINTR		COLD DECK DEG F:	0
PRESENT TEMP WINTE	UNOCC: U	MIXED AIR DEG F:	0
	UM OCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SI	•		_:
PRESENT TEMP SUM PRESENT TEMP SUM		OTHER SETPOINT DEG F:	0
	UNOCC: 0		EMAND LIMIT CNTRLS?
PRESENT TEMP SUM	UNOCC: 0  DL: N MIXED AIR DMPR	CONTROL: N IMPLEMENT D	
PRESENT TEMP SUM	UNOCC: 0  DL: N MIXED AIR DMPR DL: N ECONOMIZER DE	R CONTROL: N IMPLEMENT D	EMAND LIMIT CNTRLS?
PRESENT TEMP SUM MIN OA DMPR CONTRO MAX OA DMPR CONTRO	UNOCC: 0  DL: N MIXED AIR DMPR DL: N ECONOMIZER DE DL: N ECONOMIZER WE	R CONTROL: N IMPLEMENT D	EMAND LIMIT CNTRLS? TIME CLOCK:
PRESENT TEMP SUM MIN OA DMPR CONTRO MAX OA DMPR CONTRO RET AIR DMPR CONTRO	UNOCC: 0  DL: N MIXED AIR DMPR DL: N ECONOMIZER DE DL: N ECONOMIZER WE DL: N	R CONTROL: N IMPLEMENT D	EMAND LIMIT CNTRLS? TIME CLOCK:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/12/94

LOCATION: FT. RILEY, KS PREPARED BY: JM

BUILDING NUMBER: 0410 AHU NUMBER: UH-2 AHU LOCATION: BASEMENT  REFRIG SYS # SRVNG AHU: SERVES AREA: BSMT. S.E. WING	
REFRIG SYS # SRVNG AHU: SERVES AREA: BSMT. S.E. WING	
% OF BLDG AREA HEATED: 8	
AHU UNIT TYPE UNIT HEATER NUMBER OF ZONES IF MZ UNIT:	0
<b>CFM-HTG</b> : 1,270 <b>CFM-CLG</b> : 0	
MIN %OA: 0 MAX %OA: 0	
NAMEPLATE	
UNIT MFG: N/A UNIT MODEL:	
SUPPLY FAN HP: 0.33 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG: RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	
SCHEDULE	
SCHEDULE  DAY SCHEDULE NO: 10 MONTH SCHEDULE NO:	3
	3
DAY SCHEDULE NO: 10 MONTH SCHEDULE NO: SCHEDULE COMMENTS:	3
DAY SCHEDULE NO: 10 MONTH SCHEDULE NO: SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT:	3
DAY SCHEDULE NO:         10         MONTH SCHEDULE NO:           SCHEDULE COMMENTS:         SUN:         MON:         TUE:         WED:         THUR:         FRI:         SAT:           PRES START:         0         0         0         0         0         0	3
DAY SCHEDULE NO:         10         MONTH SCHEDULE NO:           SCHEDULE COMMENTS:         SUN:         MON:         TUE:         WED:         THUR:         FRI:         SAT:           PRES START:         0         0         0         0         0         0           PRES STOP:         24         24         24         24         24         24	3
DAY SCHEDULE NO:         MONTH SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0         0         0         0         0         0           PRES STOP: 24         24         24         24         24         24         24           REQ START: 0         0         0         0         0         0         0	3
DAY SCHEDULE NO:         MONTH SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24 24	3
DAY SCHEDULE NO:         MONTH SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	3
DAY SCHEDULE NO:         MONTH SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	3
DAY SCHEDULE NO:         MONTH SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	3
DAY SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0         0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24 24         24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0 0         0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24         24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: □         □           ON: □         □         □           CONTROLS: ELECTRIC         THERMOSTAT TYPE: □	
DAY SCHEDULE NO:         MONTH SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0         0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24         24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:         INDICATE OF CONTROLS: ELECTRIC           TYPE OF CONTROLS: ELECTRIC         THERMOSTAT TYPE: HOT DECK DEG F: 0           PRESENT TEMP WINTR OCC: 0	
DAY SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	
DAY SCHEDULE NO: SCHEDULE NO: SCHEDULE COMMENTS:	
DAY SCHEDULE NO:           SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	
DAY SCHEDULE NO: SCHEDULE NO:   SCHEDULE COMMENTS:	
DAY SCHEDULE NO: SCHEDULE NO:	RLS? N
DAY SCHEDULE NO:   10	RLS? N
DAY SCHEDULE NO: SCHEDULE NO:	RLS? N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: JM

BUILDING NUMBER:	0410	E	OILER RM LOCA	TION:	MER		
BOILER UNIT							
SOURCE OF BLDG HE		ERTER SERVES ARE	A OR SERVICE:	ALL			
BOILER TAG: BOILER TYPE: FUEL TYPE:	BLR-1 MED PRESS STEAM (15# NAT. GAS	TO 125#) CONV	NVERTER VERTER TAG: ERTER TYPE: HT SOURCE:				
CENTRAL PLANT	DIRECT						
NAMEPLATE		% AREA HEA	ATED BY BB RAD	IATION:			20
BOILER MFG: BURHAN UNIT MODEL: 4FL2094 COMMENTS:		-	AP OUTPUT (BTUI			1,749,000 2,186,000	: :
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	10		MONTH	I SECHD	ULE NO:		1
PRES STOP: 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	WED:         THUR:           0         0           24         24           0         0           24         24	FRI: SAT:  0 0 24 24 0 0 24 24				
MONTHS JAN: FEB: ON:		AY: JUN: JUL:	AUG: SEP:	OCT:	NOV:	DEC:	
							_
CONTROLS							

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/12/94

PREPARED BY: JM

# PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	0410			BL	.DG NAME:	ENL BA	RRACKS	W/AS			
PER RAD	(SYSTE	VITAG) N	O: RAE	)-1	T-12	RAD	SYS LOC	ATION:			PROPERTY AND ASSESSED.	
SO	URCE OF	HEATIN	G: BOI	LER			SERVES	AREA:	HALLWA	YS/STAIF	₹S	
RAD	IATION	UNIT TYP	E: STE	AM			% ARE	A HTG:		2	0	
SCHEE	ULE											
DA	YS SCH	EDULE N	O:	1(	)	MONTHS	SCHEDUL	E NO:		1		
SCHE	DULE C	OMMENT	's:									
		SUN:	MON:	TUE	: WED:	THUR:	FRI:	SAT:				
PRES S	TART:	0	0	(	0	0	0	0				
PRES	STOP:	24	24	24	24	24	24	24				
REQ S		0	0	(		0	0	0				
REQ	STOP:	24	24	24	24	24	24	24				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY: J	IUN: JUL	.: AUG:	SEP	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$					$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTR	ROLS											
TY	PE OF R	AD. CON	TROLS:	PNEUN	MATIC							
	RADIA	TION CO	NTROL:	2-WAY	VALVE, M	ANUAL O						
	ос	C HT SPA	ACE SP:		65							
		C HT SPA			0		F	RESET	ONTROL	: N		
	CONTR	OL COM	MENTS:									-
												•

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/12/94

PREPARED BY: JM

#### REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

DI DC MIMPED. 044	0	DI DO MAME. EN	II DADDACKC MAC	
BLDG NUMBER: 041	<u> </u>	BLDG NAME: EN	IL BARRACKS W/AS	
REF. UNIT NUMBER/TAG	3: CH-1	-	LOCATION (MER	#): OUTSIDE
			AHU'S SERVE	D: AHU-1, 2, & 3
UN!	T TYPE RECIPROCATION	NG WITH AIR COC	LED CONDENSING U	NIT .
NAMEPLATE				
CHILLER MFG:	TSI	:	TOWER MFG:	:
CHILLER MODEL:		# OF	TOWER FANS:	6
CHILLER SERIAL NO:			TOWER FAN V:	208
CHILLER V:	0	TOV	VER FAN AMPS:	48
CHILLER AMPS:	135	7	OWER FAN HP:	1
CHILLER PH:	0		<u></u>	
CHILLER CAP (TONS):	73.8			
COMMENTS:				
SCHEDULE				
DAYS SCHEDULE	E NO: 10	N	IONTHS SCHEDULE N	IO: 2
SCHEDULE COMME	NTS:			
SUN	N: MON: TUE:	WED: THUR:	FRI: SAT:	
	0 0 0	0 0	0 0	
	24 24 24	24 24	24 24	ı
	0 0 0	0 0	0 0	
REQ STOP: 2	24 24 24	24 24	24 24	
MONTHS JAN: FEB	: MAR: APR: MA	Y: JUN: JUL	: AUG: SEP: C	OCT: NOV: DEC:
ON:				
CONTROLS				
TYPE OF CONT	ROLS: ELECTRIC			
CWS SET	POINT:	0	CNWS SETPOINT:	0
CWR SET	POINT:	<del></del>	ONWR SETPOINT:	0,
PRESS L	.ITE HI: N TI	EMP LITE HI: N	OTHER INDICA	TIODS
PRESS LITE		PLITE LOW: N	=	TIOKS.
PRESS GA		MP GAUGES: N	<b>=</b>	
CONTROLS CO		OAOOEO: <u>[18</u>	<b>.</b>	:
CW and CNW P				
PUMP TAG: 1	PUMP HP:	3	<del>-</del>	ALDOR
PUMP SERVICE: CW PUM	MP (Chilled Water)		PUMP MODEL: M	3211T

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

410

FILE:

	AIR H	ANDI IN	G UNIT - HVAC L	PGRADE C	DBSERVAT	TIONS		
AHU NO.:	AHU-1,2	LOCATION		OOR MER				
	MZ-4(3),MZ-6(2				MODEL:			
SZ - Single Zone	H&V - Heatir		FC - Fa	n Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe	)	
MZ - Mulitzone	VAV - Variat			Reheat System	·	,	•	
DD - Dual Duct	UH - Unit He	ater		duction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A:	ОК: Х	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
. & B. DAMPER	N/A:	ОК:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	EXHAUST A	IR DAMPER	R NOT SEEN ON UNIT#	2			DPR-ACT = Dampe	r Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
	<del></del>							
SUPPLY AIR FAN	OK: X (#3)	REPLACE	FAN BEARINGS: X (#2)	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
NLET VANES	N/A: X	lok:	COMMENTS:		······································			
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN				
COMMENTS:		11121 2102		100				
JOWNVIENTO.								
-					CNTLVLV	(NONE)	RP- ACT:	RP-BD:
COOLING COIL	IN/A:	Ток: х	REPLACE:	ISIZE:	CIVILATA		pro - AO ti	יטט.
	N/A: N/A:	OK: X OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL		1					1	
HEATING COIL PREHEAT COIL	N/A:	ок: х	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X	OK: X	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace t	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
PREHEAT COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION DUCT INSULATION	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace t	RP-BD: RP-BD: RP-BD:
PREHEAT COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace t	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

410

FILE:

	AIR I	HANDLIN	G UNIT - H	VAC UPO	RADE (	DBSERVA"	TIONS		
AHU NO.:	AHU-3	LOCATION	V (Rm)	MER BASEN	MENT				
AHU TYPE:	MZ-2	MFG.:		<u> </u>		MODEL:			
SZ - Single Zone	H&V - Hea	iting & Vntltng		FC - Fan Co	l (Indicate 2	P for 2 Pipe or	4P for 4 Pipe)		
MZ - Mulitzone	VAV - Vari	able Air Vol.		RHT - Rehea	at System				
DD - Dual Duct	UH - Unit I	Heater		IND - Inducti	on System				
O.A. DAMPER	N/A:	OK: X	REPLACE:		SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:		SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK: X	REPLACE:		SIZE:	DPR-ACT	OK: X	RP- ACT:	
COMMENTS:	1ST FLOC	OR AHU TYPI	CAL (CENTER	OF BLDG)				DPR-ACT = Dampe	r Actuator
								RP-ACT = Replace	Actuator
					T				
FILTER SECTION	N/A:	OK: X	REPLACE:		SIZE:				
COMMENTS:									
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARING	GS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE			COMMEN	TS:			
INLET VANES	N/A: X	IOK:	COMMENT	S:	<u></u>		······································	·	
RETURN AIR FAN	OK:		FAN BEARING		COMMEN.	TS:			***
RETURN FAN MOTOR	OK:	REPLACE			COMMEN.				
COMMENTS:		1,42, 0,402			1				
COMMENTS.						**			
COOLING COIL	N/A:	OK: X	REPLACE:		SIZE:	CNTLVLV	(NONE)	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:		SIZE: 1"	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:								RP-ACT = Replace	Actuator
								RP-BD = Replace I	Body
						<u></u>			***
ALUA BUMB MOTOR	JAI/A. V	TOV:	REPLACE:		SiZE:				
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:				
AHU PUMP SEALS	N/A: X		INC. BACE.		LAILE.				
COMMENTS:									
PIPE INSULATION	N/A:	OK:	MISSING:	Х	ESTIMATE	ED QUANTITY:		10' @ 1-1/2	R
DUCT INSULATION	N/A:	OK: X	MISSING:		ESTIMATI	ED QUANTITY:			
COMMENTS:									
			·						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

410

FILE:

: 410.XLS

C-WCT = Centrifugal w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-MCCU = Air Cooled Condensing Unit  COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: LOOKS NEWLY INSTALLED 6 CONDENSER FANS COOLING TOWER N/A: OK: REPLACE: SIZE: COMMENTS: COMMENTS: COMMENTS: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE	Г	REFRIGE	RATION I	EQUIPMENT -	HVAC UPGRADE OBSERVATIONS	
C-WCT = Centrifugal w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-MCCU = Air Cooled Condensing Unit  COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: LOOKS NEWLY INSTALLED 6 CONDENSER FANS COOLING TOWER N/A: OK: REPLACE: SIZE: COMMENTS: COMMENTS: COMMENTS: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE: SIZE: CHIMPUMP MOTOR N/A: OK: REPLACE	CHILLER / EQUIP. NO.	Y,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CH-1	LOCATION (RM	OUTSIDE (NORTH OF BLDG)	
ASB-WCT = Absorption w/ Water Side Cooling Tower	REFG. EQUIP. TYPE:		R-ACCU			
ASB-WCT = Absorption w/ Water Side Cooling Tower	C-WCT = Centrifugal w/ W	/ater Side Co	ooling Tower	R- <i>F</i>	ACCU = Reciprocating w/ Air Cooled Condensing Unit	
COMP. MOTOR   N/A:   OK: X   REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK: X   REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK: X   REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK: REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK: REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK: REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK: REPLACE:   SIZE:   SIZE:   COMP. MOTOR   N/A:   OK: REPLACE:   SIZE:	R-WCT = Reciprocating w	/ Water Side	Cooling Towe			
COMP. MOTOR         N/A:         OK: X         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CTACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         LOOKS NEWLY INSTALLED         6 CONDENSER FANS           COOLING TOWER         N/A:         OK:         REPLACE:         SIZE:           AIR COOLED COND.         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         CHILLER INSUL.         N/A:         OK:         X         REPLACE:         SIZE:           CHW PIPE INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:           CHW PIMP MOTOR         N/A:         OK:         X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:	ACCU = Air Cooled Conde	ensing Unit				
COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         LOOKS NEWLY INSTALLED         6 CONDENSER FANS           COOLING TOWER         N/A:         OK:         REPLACE:         SIZE:           COOLING TOWER         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         SIZE:         SIZE:           CHILLER INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:           CHILLER INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:           CHILLER INSUL.         N/A:         OK:         MISSING:         ESTIMATED QUANTITY:           CHILLER INSUL.         N/A:         OK:         MISSING:         ESTIMATED QUANTITY:           CHILLER INSUL.         N/A:         OK:         MISSING:         ESTIMATED QUANTITY:	COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR  N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  COMMENTS:  LOOKS NEWLY INSTALLED  6 CONDENSER FANS  COOLING TOWER  N/A: OK: REPLACE: SIZE:  AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:		N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE:  CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE:  COMMENTS: LOOKS NEWLY INSTALLED  6 CONDENSER FANS  COOLING TOWER N/A: OK: REPLACE: SIZE:  COMMENTS:  COOLING TOWER N/A: OK: REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHIW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:		N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE:  COMMENTS: LOOKS NEWLY INSTALLED 6 CONDENSER FANS  COOLING TOWER N/A: OK: REPLACE: SIZE:  COMMENTS: SIZE:  COOLING TOWER N/A: OK: REPLACE: SIZE:  COMMENTS:  COOLING TOWER N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK:	COMP. MOTOR	N/A:	ОК:	REPLACE:	SIZE:	
CTIACCU FAN MTR  N/A:  OK:  REPLACE:  SIZE:  COMMENTS:  LOOKS NEWLY INSTALLED  6 CONDENSER FANS  COOLING TOWER  N/A:  OK:  REPLACE:  SIZE:  COMMENTS:  COMMENTS:  COMMENTS:  CHILLER INSUL.  N/A:  OK:  MISSING:  ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A:  OK:  MISSING:  ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A:  OK:  KEPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:		
COMMENTS: LOOKS NEWLY INSTALLED 6 CONDENSER FANS  COOLING TOWER N/A: OK: REPLACE: SIZE:  AIR COOLED COND. N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. N/A: X OK: X REPLACE: SIZE:  CHILLER INSUL. N/A: OK: X REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER INSUL. N/A: OK: REPLACE: SIZE:  CHILLER IN	CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
6 CONDENSER FANS  COOLING TOWER  N/A: OK: REPLACE: SIZE:  AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR	N/A:	ОК:	REPLACE:	SIZE:	
COOLING TOWER	COMMENTS:	LOOKS	NEWLY INSTA	LLED		
AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:		6 CONDE	NSER FANS			
COMMENTS:  CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	COOLING TOWER	N/A:	OK:	REPLACE:	SIZE:	
CHILLER INSUL.   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:  CHW PIPE INSUL.   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CHW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:	AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:	
CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PUMP MOTOR  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:	COMMENTS:					
CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PUMP MOTOR  CHW PUMP MOTOR  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:						
CHW PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHW PUMP MOTOR			101/	II II OO II O		
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PIPE INSUL.	JN/A: X	UK:	MISSING:	ESTIMATED QUANTITY:	
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	COMMENTS:					
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	COMMENTS:  CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	
CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A:	OK: X   OK: X   OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP MOTOR	N/A:   N/A:   N/A:   N/A:   N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS. MADATUON OUD	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS: MARATHON, 3 HP	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   N/A:	OK: X OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

410

FILE:

	DUILE		VERTER -				CHOILY	
BOILER/CONVERTER NO.		BLR-1	LOCATION (		BASEMEN		DE 540	
BOILER TYPE:		STM	MFG.:	BURNHAM		MODEL:	PF-510	
CONVERTER TYPE:	<b></b>	<u> </u>	MFG.:		LITERATION	MODEL:	- 1 11 A/ 4 - C4	Canyadar
•	-		Water Conv.			_	p HW to Stean ater Convertor	Convertor
			. HW to HW Cv.		TOK:	X	REPLACE:	
	ATMOSPH			X	UN.	^	INEPLACE.	
COMMENTS:	SMELL GA	S, BOILER C	OLD		<del>.,</del>			
		<del></del>			,			
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:								
BLR INSULATION	N/A:	OK: X	MISSING:		TESTIMATE	ED QUANTIT	Y:	
	N/A:	OK:	MISSING:	X		D QUANTIT		25' @ 5"
COMMENTS:	1477.	1014	Timoon to.		1			
	-							
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
	N/A:	OK:	REPLACE:		SIZE:			
	N/A:	OK:	REPLACE:		SIZE:			
	N/A:	OK:	REPLACE:		SIZE:			
	N/A:	OK:	REPLACE:		SIZE:		****	
	N/A:	OK:	REPLACE:		SIZE:			
	N/A:	ОК:	REPLACE:		SIZE:			
COMMENTS:								
CV PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:	-		
CV PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:	JL							
					74.4 A			
	N/A: X N/A: X	OK:	MISSING:			ED QUANTIT		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

#### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 0540 BLDG NAME: OFF QTRS MILIT

GAS METER: Y

SUSPECT ACM: N

CONDITIONED SQFT:

14,528

#### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

WED: THUR: SUN: MON: TUE: FRI: SAT: PRES START: 0 0 0 0 24 24 24 24 24 24 PRES STOP: 0 0 0 0 0 0 0 REQ START: 24 24 REQ STOP: 24 24 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/12/94
PREPARED BY: JM/AJN

BUILDING NUMBER: 0540 AHU NUMBER: FC-		: THROUGHOUT BLDG
REFRIG SYS # SRVNG AHU:	SERVES AREA: % OF BLDG AREA HEATED:	ALL 100
AHU UNIT TYPE FAN COILS - 2	PIPE NU	JMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	16,530 <b>CFM-CLG</b> :	16,530
MIN %OA:	0 MAX %OA:	0
NAMEPLATE		·
UNIT MFG:	UNI	IT MODEL:
SUPPLY FAN HP:	10 RET/EX	H FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN	<del></del>
SUPPLY FAN MTR MODEL:	RET/EXH FAN MT	R MODEL:
COMMENTS: TOTAL	FOR 37 FAN COIL UNITS	
COILS		
Coil	Coil Type Modulating	Valve?
PREHEAT COIL: NONE		
HEATING COIL: NONE		
REHEAT COIL: NONE		
HUMIDIFIER: NONE COOLING COIL: DX		
SCHEDULE		
SCHEDULE		
DAY SCHEDULE NO: 10 SCHEDULE COMMENTS:		MONTH SCHEDULE NO: 3
PRES START: 0 0		SAT:
PRES START: 0 0 PRES STOP: 24 24	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	<u>0</u> 
REQ START: 0 0	$\frac{24}{0}$ $\frac{24}{0}$ $\frac{24}{0}$ $\frac{24}{0}$ $\frac{24}{0}$	0
REQ STOP: 24 24	24 24 24 24	24
MONTHS JAN: FEB: MAR: ON:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
CONTROLS		
TYPE OF CONTROLS:		OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	DECK DEG F: 0 DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0	ED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPO	
PRESENT TEMP SUM UNOCC:	0 OTHER SET	POINT DEG F: 0
MIN OA DMPR CONTROL: N		INDI ENENT DENAME LIMIT ONTO CO.
, -, -, -, -, -, -, -, -, -, -, -, -,	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?   N
MAX OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N ECONOMIZER DB CONTROL: N	
		TIME CLOCK: N
MAX OA DMPR CONTROL:	ECONOMIZER DB CONTROL:	TIME CLOCK: N
MAX OA DMPR CONTROL: N RET AIR DMPR CONTROL: N	ECONOMIZER DB CONTROL:	TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/12/94

PREPARED BY: JM/AJN

BUILDING NU	JMBER: (	540				E	OILER F	RM LOCA	TION:	MER		
BOILER UN	VIT											
			BLR/COI	VERTER	SERV	/ES ARE	A OR SE	RVICE:	ALL			
SOURCE OF	BLDG HEA	\1										·
BOILI							NVERTE	_				
	RTAG:						/ERTER	=				
	RTYPE:		250 DEG)				ERTER 1	-				<del></del>
FUEL	_TYPE: 1	NAT. GAS				CONV	HT SOL	IRCE:				
CENTRAI	L PLANT D	IRECT										·
IAMEPLA'	TE				% A	REA HEA	ATED BY	BB RAD	NOITAION:			0
BOILER MFG:	BURNHAM	1				BLR CA	P OUTP	UT (BTU	H):		138,000	)
UNIT MODEL:	PGX-2006	AWNI				BLR (	CAP INP	UT (BTU	H):		164,000	<u>)</u>
COMMENTS:												-
CHEDULI	E											'
DAYS SCHEDU	=	10						MONTH	SECHD	ULE NO:		1.
	SUN:	MON:	TUE			UR:	FRI:	SAT:				
PRES START:		0			= ====	24	24	0 24				:
PRES STOP:		= 24	24	====	= ===		0	0				:
REQ START: REQ STOP:		24	24			24	24	24				:
MONTHS JAN	: FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$		$\boxtimes$						$\boxtimes$	$\boxtimes$	$\boxtimes$	
ONTROL	S											
TYPE O	F BLR COI	NTROLS:	ELECT	RIC				RESE	T CONTI	ROLS: [	Υ	
OPE	RATING SE	TPOINT:		0 [	DEG F	or PSIG						
TYPE OF BU	RNER CO	NTROLS:										
CONT	ROLS COM	MENTS:										
W PUMP				-								
PUMP TAG	: 1		PUN	IP HP:		0.0	4	PUMP MI	G: TA	co		
PUMP SERVICE	: HW PUI	MP .					PU	MP MOD	EL: 007	7-F4		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: JM/AJN

BUILDING NUMB	ER: :0540			BOILER	RM LOCA	ATION:	MER		
<b>BOILER UNIT</b>	•								
SOURCE OF BLD	G HEAT	BLR/CONVER	TER SERVES AR	EA OR SE	RVICE:	ALL			
● 図 BOILER	<u>-</u>		П	ONVERT	FR				
BOILER TA	AG: BLR-2			VERTER					
BOILER TY	PE: HW (UP TO	250 DEG)		VERTER	=				
FUEL TY	PE: NAT. GAS		CON	V HT SOL	JRCE:				<del>-</del>
CENTRAL PL	ANT DIRECT								
NAMEPLATE			% AREA HI	ATED BY	/ BB RAD	DIATION			0
BOILER MFG: BUR	NHAM		BLR C	AP OUTP	UT (BTU	H):		138,000	
UNIT MODEL: PGX	-200GAWNI			CAP INP	•			164,000	
COMMENTS:									
CHEDULE									
DAYS SCHEDULE N					MONTH	SECHE	ULE NO:		1
	SUN: MON:		ED: THUR:	FRI:	SAT:				
PRES START:	0 0		0 0 =	0	0				
PRES STOP:	$\frac{24}{0} = \frac{24}{0}$	24	$\frac{24}{0} = \frac{24}{0} = \frac{24}{0}$	24	<u>24</u> 0				
REQ STOP:	24 24	24	24 24	24	24			:	:
MONTHS JAN: F	EB: MAR:	APR: MAY:	JUN: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:						$\boxtimes$	$\boxtimes$	$\boxtimes$	
ONTROLS									•
	R CONTROLS:	ELECTRIC	0 DEG F or PSIG		RESET	CONTR	ROLS:	Y	
TYPE OF BURNE		<u></u>	ODEOT OF SIG						
CONTROLS	COMMENTS:					-			
W PUMP									
PUMP TAG: 1		PUMP HP:	0.0	14 F	PUMP MF	G: TAC	0		1
PUMP SERVICE: HV	V PUMP			'	/P MODE				=

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/12/94

PREPARED BY: JM/AJN

BUILDING N	IUMBER: (	)540				BOILER	RM LOCA	ATION:	MER		
<b>30ILER U</b>	NIT										
2011205-01	- DI DO III		BLR/CON	VERTER S	ERVES AR	A OR SE	RVICE:	ALL			
— SOURCE O	F BLDG HEA	A I									
● ⊠ BOI	_					ONVERT	-				:
	ER TAG:				<del></del>	IVERTER	=				
the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	R TYPE:		250 DEG)			/ERTER					<del></del> . ,
FUE	EL TYPE:	NAT. GAS			CON	V HT SOL	JRCE:				
CENTRA	AL PLANT D	IRECT	-								
NAMEPLA	TE				% AREA H	ATED BY	BB RAI	DIATION:			0
BOILER MFG:	BURNHAN	1			BLR C	AP OUTP	UT (BTU	H):		138,000	_
UNIT MODEL:	PGX-2006	AWNI			BLR	CAP INP	UT (BTU	H):		164,000	 
COMMENTS:	-										_
											_
CHEDUL	Ε										
DAYS SCHED	ULE NO:	10			-		MONTH	SECHE	ULE NO:		1
CHEDULE CON	MMENTS:										:
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START	г:0	0	0	0	0	0	0				
PRES STOR	P:24	24	24	24	24	24	24				
REQ STAR	r: <u> </u>	. 0	0	0	0	0	0				
REQ STOR	P: 24	24	24	24	24	24	24				
MONTHS JAI	N: FEB:	MAR:	APR: I	MAY: JU	JN: JUL:	AUG:	SEP:	ост:	NOV:	DEC:	
ON:			$\boxtimes$					$\boxtimes$			
CONTROL	.s										
TYPE (	OF BLR CO	NTROLS:	ELECTR	IC			RESE	T CONTE	ROLS:	Y	
OPE	RATING SE	TPOINT:		0 DE	G F or PSIG						
TYPE OF B	URNER CON	NTROLS:									
CON.	TROLS CON	MENTS:									
W PUMP	)										
PUMP TAC	S: 1		PUMF	HP:	0.	04	PUMP MF	G: TA	co		
PUMP SERVICE	E: HW PUN	/IP				PU	MP MODI	EL: 007	'-F4		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: JM/AJN

BUILDING NU	JMBER:	0540	<u>'                                    </u>			BOILER	RM LOC	ATION:	MER		
BOILER UI	VIT										
	<del>****</del>		BI BICO	WEDTED (	SERVES ARI	A OD SI	EDVICE:	ΛΙΙ			
SOURCE OF	BLDG HE		BENCOI	WENTER S	SERVES ARI	EA OR SI	ERVICE.	ALL			
● ⊠ BOIL	ER				ПС	ONVERT	ER				<del></del>
. —	R TAG:	3LR-4				IVERTER	-				
BOILE	R TYPE:	HW (UP TO	250 DEG)		CON	/ERTER	TYPE:				
FUE	L TYPE:	NAT. GAS			CON	V HT SOI	URCE:				_ ;
CENTRA	L PLANT [	DIRECT									
NAMEPLA	TE				% AREA HE	ATED B	Y BB RAI	DIATION:			0
BOILER MFG:	BURNHAN	1			BLR C	AP OUTF	PUT (BTU	H):		138,000	
UNIT MODEL:	PGX-2006	AWNI			BLR	CAP INF	PUT (BTU	н):		164,000	
COMMENTS:											
COMMENTO:											
SCHEDULI	Ε										
DAYS SCHEDU	:	10					MONT	H SECHE	ULE NO		1
											_
PRES START:	SUN:	MON:	TUE:		THUR:	FRI:	SAT:				
PRES STOP:		0	24		24	24	0 24				
REQ START:		0	0		======================================	0	0				
REQ STOP:		24	24		24	24	24				:
MONTHS JAN	: FEB:	MAR:	APR:	MAY: JU	UN: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$					$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTROL	S										
TYPE O	F BLR COI	NTROLS:	ELECT	રા૦			RESE	T CONTE	ROLS:	Y	
OPER	RATING SE	TPOINT:		0 DE	G F or PSIG						
TYPE OF BU	RNER COI	NTROLS:									
CONT	ROLS COM	MENTS:									
HW PUMP											
PUMP TAG:	1		PUM	P HP:	0.0	14	PUMP MI	G: TAC	0		
PUMP SERVICE	: HW PUN	/P		-		PU	MP MODI	EL: 007	-F4		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: JM/AJN

BUILDING NU	MBER: 0	540				BOILER	RM LOCA	TION:	MER		
<b>BOILER UN</b>	IT										
0011005.05.0	1 DO UE4		BLR/CON	VERTER S	SERVES AR	EA OR SE	RVICE:	ALL			
SOURCE OF B	LDG HEA	\									
● ⊠ BOILE					· 🗀 -	ONVERT NVERTER					
	TYPE		250 DEG)			NVERTER IVERTER	≒				
	TYPE: H		250 DEG)			IV HT SOL	-				
CENTRAL	PLANT D	IRECT									
NAMEPLAT	Έ				% AREA H	EATED B	Y BB RAD	NOITAIC			0
BOILER MFG:	BURNHAN	1			BLR	CAP OUT	UT (BTU	H):		138,000	-
==	GX-2006/				BLI	R CAP INF	UT (BTU	н):		164,000	-
COMMENTS:											-
OUEDII E											-
SCHEDULE											
DAYS SCHEDUL	.E NO: _	10					MONTH	SECHE	ULE NO:	:	1
SCHEDULE COMM	ENTS:										
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START:	0	0	0	0	24	0 24	24				
PRES STOP:	=======================================	= 24	24	24	0 =	0 =	0				
REQ START: REQ STOP:	24	24	24	24	24	24	24				
MEQ 0101.											_;
MONTHS JAN:	FEB:	MAR:	APR:	MAY: J	UN: JUL	: AUG:	SEP:	OCT:	NOV:	DEC:	-
ON: ⊠	$\boxtimes$	$\boxtimes$	$\boxtimes$							$\boxtimes$	
CONTROLS	}										
TYPE OF	BLR CON	NTROLS:	ELECTF	RIC			RESE	T CONTI	ROLS:	$\overline{\gamma}$	
	ATING SE				G F or PSI	3			_		
TYPE OF BUR	NER CON	NTROLS:								,	
CONTR	OLS CON	MENTS:									
HW PUMP						-					
PUMP TAG:	1		PUM	P HP:	0	.04	PUMP MI	FG: TA	co		
PUMP SERVICE:	HW PU	ΛP				PU	MP MOD	EL: 007	7-F4		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/12/94

PREPARED BY: JM/AJN

BUILDING NUMBER:	0540		i	BOILER	RM LOC	ATION:	MER		
BOILER UNIT									
SOURCE OF BLDG HE	BLR/	CONVERTER SE	RVES ARE	A OR SE	ERVICE:	ALL			
● <u>BOILER</u> BOILER TAG:	BLR-6			ONVERTI VERTER					
BOILER TYPE: FUEL TYPE:	HW (UP TO 250 DE NAT. GAS	:G)	CONV	ERTER HT SOL	TYPE:				
CENTRAL PLANT	DIRECT								
AMEPLATE		%	AREA HE	ATED BY	/ BB RAI	DIATION:			0
BOILER MFG: BURNHA UNIT MODEL: PGX-200 COMMENTS:					UT (BTU			138,000 164,000	
CHEDULE									-
DAYS SCHEDULE NO: CHEDULE COMMENTS:	10				MONTH	I SECHD	ULE NO:		1
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24	0 24 0	UE: WED: 1 0 0 24 24 0 0 24 24	THUR: 0 24 0 24	FRI: 0 24 0 24	SAT: 0 24 0 24				
ONTHS JAN: FEB:	MAR: APR	: MAY: JUN	i: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
						× ·	$\boxtimes$		
ONTROLS									
TYPE OF BLR CO OPERATING S TYPE OF BURNER CO	ETPOINT:	CTRIC 0 DEG	F or PSIG		RESE	CONTR	ROLS: [	Y	
CONTROLS CO	MMENTS:								
IW PUMP									
PUMP TAG: 1 PUMP SERVICE: HW PU		UMP HP:	0.04		PUMP MF				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: JM/AJN

BUILDING NUMBER: 0540	BOILER RM LOCATION: MER	
BOILER UNIT		
— SOURCE OF BLDG HEAT —	ONVERTER SERVES AREA OR SERVICE: DHW	<del></del>
BOILER TAG: BLR-7 BOILER TYPE: HW (UP TO 250 DEG) FUEL TYPE: NAT. GAS	CONVERTER CONVERTER TAG: CONVERTER TYPE: CONV HT SOURCE:	
CENTRAL PLANT DIRECT		
NAMEPLATE	% AREA HEATED BY BB RADIATION:	0
BOILER MFG: BURNHAM UNIT MODEL: PGX-2006AWN! COMMENTS:  SCHEDULE	BLR CAP OUTPUT (BTUH): 138,000 BLR CAP INPUT (BTUH): 164,000	
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:	MONTH SECHDULE NO: 3	
REQ START: 0 0	E: WED: THUR: FRI: SAT:  0 0 0 0 0 0  24 24 24 24 24  0 0 0 0 0  24 24 24 24 24  24 24 24 24  24 24 24 24	
MONTHS JAN: FEB: MAR: APR: ON:	MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
CONTROLS		
TYPE OF BLR CONTROLS: ELEC OPERATING SETPOINT: TYPE OF BURNER CONTROLS:	TRIC RESET CONTROLS: N  0 DEG F or PSIG	-
CONTROLS COMMENTS:		
	MP HP: 0.04 PUMP MFG: TACO PUMP MODEL: 007-F4	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/12/94

PREPARED BY: JM/AJN

BUILDING NUMBER: 0540		BOILER RM LOCATION:	MER
BOILER UNIT			
	BLR/CONVERTER SE	RVES AREA OR SERVICE: DHW	
— SOURCE OF BLDG HEAT —			The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
● BOILER		CONVERTER	
BOILER TAG: BLR-8		CONVERTER TAG:	
BOILER TYPE: HW (U		CONVERTER TYPE:	
TOLLTIFE. NAT.	JAO	CONV HT SOURCE:	
CENTRAL PLANT DIREC	эт		
NAMEPLATE	%	AREA HEATED BY BB RADIATION	1:0
BOILER MFG: BURNHAM		BLR CAP OUTPUT (BTUH):	138,000
UNIT MODEL: PGX-2006AWN	1	BLR CAP INPUT (BTUH):	164,000
COMMENTS:		TO THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE PART OF THE	
SCHEDULE			·
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:	0	MONTH SECH	DULE NO: 3
		HUR: FRI: SAT:	
PRES START: 0	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	0 0 0	
REQ START: 0	$\frac{24}{0} = \frac{24}{0} = \frac{24}{0} = \frac{24}{0}$	$\frac{24}{0} = \frac{24}{0} = \frac{24}{0}$	
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB: MA	R: APR: MAY: JUN:	III. AUG. SED. OCT.	NOV. DEC
ON:			NOV: DEC:
CONTROLS			
TYPE OF BLR CONTRO	DLS: ELECTRIC	RESET CONT	ROLS: N
OPERATING SETPOI		or PSIG	
TYPE OF BURNER CONTRO	ils:		
CONTROLS COMMEN	ITS:		
HW PUMP			
PUMP TAG: 1	PUMP HP:	0.04 PUMP MFG: TA	CO
PUMP SERVICE: HW PUMP		PUMP MODEL: 007	7-F4

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94 PREPARED BY: JM/AJN

BUILDING NUMBER: 0540	BOILER RM LOCATION: MER
BOILER UNIT	
	RTER SERVES AREA OR SERVICE: ALL
SOURCE OF BLDG HEAT	
O BOILER	CONVERTER
BOILER TAG:	CONVERTER TAG:
BOILER TYPE:	CONVERTER TYPE:
FUEL TYPE:	CONV HT SOURCE:
CENTRAL PLANT DIRECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION: 0
BOILER MFG:	BLR CAP OUTPUT (BTUH): 0
UNIT MODEL:	BLR CAP INPUT (BTUH): 0
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:	MONTH SECHDULE NO: 3
SUN: MON: TUE: \ PRES START: 0 0 0	WED:         THUR:         FRI:         SAT:           0         0         0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 0 0	0 0 0
REQ STOP: 24 24 24	24 24 24 24
MONTHS JAN: FEB: MAR: APR: MAY	Y: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖂 🖾 🖾 🖾	
CONTROLS	
TYPE OF BLR CONTROLS: ELECTRIC	RESET CONTROLS: N
OPERATING SETPOINT:	0 DEG F or PSIG
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	
HW PUMP	
PUMP TAG: 1 PUMP HF	P: 2 PUMP MFG: MARATHON
PUMP SERVICE: DUAL TEMP PUMP	PUMP MODEL:
HW PUMP	
PUMP TAG: 2 PUMP H	P: 2 PUMP MFG: MARATHON
PUMP SERVICE: DUAL TEMP PUMP	PUMP MODEL:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/12/94

PREPARED BY: JM/AJN

#### REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0540	BLDG NAME:	OFF QTRS MILIT			
REF. UNIT NUMBER/TAG: CH-1		LOCATIO	N (MER#):	OUTSIDE	
			, ,	FAN COIL	UNITS
UNIT TYPE RECIPRO	CATING WITH AIR	COOLED CONDEN			
NAMEPLATE					
CHILLER MFG: CARRIER	,	TOWER MF	G:		
CHILLER MODEL: 38AE-044-510		# OF TOWER FAN	S:		4
CHILLER SERIAL NO: 2190F18047		TOWER FAN	V:		0
CHILLER V:	208	TOWER FAN AMP	'S:		4.6
CHILLER AMPS:	76	TOWER FAN H	P:	(	0.43
CHILLER PH:	3				
CHILLER CAP (TONS):	40				
COMMENTS:					
SCHEDULE					
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:		MONTHS SCHE	DULE NO:	2	
SUN: MON: TUE	: WED: THU	R: FRI: SA	T:		:
PRES START: 0 0	0 0	0 0	0		
PRES STOP: 24 24 2	4 24 2	24 24	24		
	00	0 0	0		:
REQ STOP: 24 24 2	4 24 2	24 24	24		
MONTHS JAN: FEB: MAR: APR: ON:	MAY: JUN:	JUL: AUG: S	EP: OCT	: NOV:	DEC:
CONTROLS					
TYPE OF CONTROLS: ELECTRIC					
CMC PETROINT.		ONINO SETTO		<del></del>	
CWS SETPOINT:	0	CNWS SETPO	<del></del>		0
CWR SETPOINT:	0	CNWR SETPO	INI:		0
PRESS LITE HI: N	TEMP LITE HI:	N OTHER	RINDICATIO	RS:	
PRESS LITE LOW: N	TEMP LITE LOW:	N			
PRESS GAUGES: N	TEMP GAUGES:	N			
CONTROLS COMMENTS:					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

540

FILE:

			S UNIT - HVAC U		DOFLAN	10113		
AHU NO.:	FC-1	LOCATION			luopei	E)/// 40 A)	/00 L 50 V/V	
AHU TYPE:	2P	MFG.:	INTERNATIONAL ENVIRO		MODEL:		YC2 L5CXX	
SZ - Single Zone		ting & Vntltng		n Coil (Indicate 2	P for 2 Pipe or	4P for 4 Pipe	;)	
MZ - Mulitzone		able Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit F			duction System		72		
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	<del>.</del> .
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:			RS. THIS FAN COIL IS				DPR-ACT = Dampe	r Actuator
			D). WE WERE UNABL		OOMS.		RP-ACT = Replace	Actuator
	ASSUME A	A SMALLER F	AN COIL FOR ROOMS					
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:						<u></u>		
	· .· · · · ·		- HAME TO -					
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	TS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	TS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		ICOMMEN.				
	UN.	INLIFEROL		JOOIVIIVIEN	10.			<del></del>
COMMENTO:								
COMMENTS:								
COMMENTS:							·······	
	NAL/A	IOK: A	IDEDI ACE:	ISIZE:	CNTI VI V	J∪K∙ X	IRP- ACT:	IRP-BD:
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK: OK: OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X DUAL TEM	OK: OK: OK: IP.	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X DUAL TEM	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X DUAL TEM	OK: OK: OK: IP.	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR ÄHU PUMP SEALS	N/A: X N/A: X N/A: X DUAL TEM	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR ÄHU PUMP SEALS	N/A: X N/A: X N/A: X DUAL TEM	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR ÄHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X DUAL TEN N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR ÄHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X DUAL TEM N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLY	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X DUAL TEN N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X DUAL TEM N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLY	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

540

FILE:

CHILLER / EQUIP. NO. REFG. EQUIP. TYPE: C-WCT = Centrifugal w/ W:						ERVATIONS	
		CH-1	LOCATION (RM)				
C-WCT = Centrifugal w/ W		R-ACCU	I	1	MODEL:	38AE-044-510	
•		•		CCU = Reciprocating w/			
R-WCT = Reciprocating w/		Cooling Towe		-WCT = Absorption w/ V	Vater Side	Cooling Tower	
ACCU = Air Cooled Conde				Cooling Tower			
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:	TYPICAL	OF 4					
COOLING TOWER	N/A:	lok:	REPLACE:	SIZE:			
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:			
COMMENTS:		10		10,22	<del></del>		
OOMIVIEIV FO.							
CHILLER INSUL.	N/A:	ок: х	MISSING:	ESTIMATED C	VANTITY	;	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED C	UANTITY	:	
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		XIIIXAIXAI	
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:			
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:			
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:			N ^
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CHW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CHW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:			
	2 LID MA	RATHON, 2 EA					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

540.XLS

**540** FILE:

	BOILE	R & CON	VERTER - HVA	C UPGRAD	E OBSER\	/ATIONS
BOILER/CONVERTER NO	).	BLR-1	LOCATION (RM)			
BOILER TYPE:		HW	MFG.: BURN	HAM	MODEL:	PXG-2006A-WNI
CONVERTER TYPE:			MFG.:		MODEL:	
STM - Steam			t Water Conv.			HW to Steam Convertor
HW - Hot Water			o. HW to HW Cv.		omestic Hot Wa	
BOILER BURNER	ATMOSPI		POWER:	OK:		REPLACE:
COMMENTS:		ITU/HR INPU				
		TU/HR OUTF	PUT			
	HIGH EFFIC					
			ARE 2 MORE UNITS FOR			
BLR PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	1/25 HP O	N EACH BOILER
BLR PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
COMMENTS:			R FROM HEATING TO		VEC	
			WITH NO AUTOMATIC	CONTROL VAL	VES.	
			, 1984 PLANS	IFOTIMAT.	ED QUANTITY	/.
BLR INSULATION	N/A:	OK: X	MISSING:			
PIPE INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY	•
COMMENTS:			RAVENT SPECIAL GAS			
	FOR CAT	. III OR IV AP	PLIANCES, UL LISTED	5350 #091189 C	N PIPE	
	10.00	Tou	IDEBLACE.	Total		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE: SIZE:	***	
HW PUMP SEALS	N/A:	OK:	REPLACE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:				***
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:		REPLACE:	SIZE:		
	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	INI/A					
HW PUMP SEALS	N/A:	OK:	REPLACE:	JOIZE.		
HW PUMP SEALS	N/A:	JOK:	REPLACE.	JOILL.		
	N/A:	JOK:	REPLACE:	OIZL.		
HW PUMP SEALS COMMENTS:						
HW PUMP SEALS COMMENTS:  CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS  COMMENTS:  CV PUMP MOTOR  CV PUMP SEALS						
HW PUMP SEALS COMMENTS:  CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS  COMMENTS:  CV PUMP MOTOR  CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS  COMMENTS:  CV PUMP MOTOR  CV PUMP SEALS  COMMENTS:	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	FD QUANTITY	<i>(·</i>
HW PUMP SEALS  COMMENTS:  CV PUMP MOTOR  CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE: SIZE:	ED QUANTITY	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJNCWW

#### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7404 BLDG NAME: ENL BARRACKS W/O DIN

ELECTRIC METER: N

CONDITIONED SQFT:

50,967

GAS METER: N SUSPECT ACM: N

#### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

MON: TUE: FRI: SAT: SUN: WED: THUR: 0 0 0 0 0 PRES START: 24 PRES STOP: 24 24 REQ START: 0 0 0 0 0 0 0 REQ STOP: 24 24 24 24 24 24

#### **REMARKS:**

Suspect ACM located on AHU duct flex joints.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

CONTROLS COMMENTS:

DATE: 10/10/94
PREPARED BY: AJNCWW

I		S NUMBEI J NUMBEI				AH	IU LOCATIO	ON: BSM	T MER			
DEEDI				NITDALD	LANT					25 51 50		
KEFKI	G 515#	SRVNG A	HU: CE	NIKALP			RVES AREA	<u> </u>	1 DALF (	JF BLDG	0	
АНИ	UNIT TYP	PE MULT	I ZONE				I	NUMBER	OF ZONE	ES IF MZ	UNIT:	6
	(	FM-HTG:			0		CFM-CLC	3:	2	9,135		
		VIIN %OA:			0		MAX %OA	<b>4</b> :		0		
NAMEI	PLAT	Ε										
	U	NIT MFG:	DUNH	AM BUSH			U	INIT MODE	EL: MZ	-320-D		
		FAN HP:			7.5			EXH FAN H			0	
		MTR MFG:	-				ET/EXH FA					
SUPPLY		R MODEL: MMENTS:				RET/	EXH FAN I	WTR MODE	EL:	A-7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
COILS												
0.110	Co	ii		Coil Type	······		Modulatir	ng Valve?				
	PREHE	AT COIL:	NONE									
		NG COIL:										
	REHE	AT COIL:	NONE			i						
	HU	MIDIFIER:	NONE									
	COOL	NG COIL:	CW									
SCHE	DULE											
DAY	SCHEDU	JLE NO:	10					MON.	тн ѕсн	EDULE NO	0:	2
SCHEDU	JLE COM	MENTS:										
		SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				:
PRES S	START:	0	0	0	0	0	0	0				
	STOP:	24	24	24	24	24	24	24				
	START:	0	0	0	0	0	<u> </u>	0				
REQ	STOP:	24	24	24	24	24	24	24				
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY: J	IUN: JU	JL: AUG	: SEP:	OCT:	NOV:	DEC:	
CONT	ROLS	)			·							
	TYPE	OF CON	TROLS:	PNEUM	ATIC			RMOSTAT		SINGLE	SETPOIN	T 0
PRE	ESENT TE	MP WINT	R OCC:			0		LD DECK			·	0
PRESE	ENT TEM	WINTR U	JNOCC:			<u>0</u>		IXED AIR			<del></del>	0
Р	RESENT	TEMP SU	M OCC:			0 0	THER SET	POINT DE	SCRIP:			
PRE	SENT TE	MP SUM (	JNOCC:			0	OTHER SE	ETPOINT [	EG F:			0
MIN C	A DMPR	CONTRO	L: N	MIX	ED AIR D	MPR CON	TROL:	IMPLI	EMENT [	DEMAND	LIMIT CN	TRLS?
MAX C	A DMPR	CONTRO	L: N			R DB CON	<u> </u>	=			TIME C	<b>:</b>
RET A	IR DMPR	CONTRO	L: N	ECO	NOMIZER	NB CON	TROL:	7	TIME	CLOCK (	OPERATION	ONAL?
EXH A	IR DMPR	CONTRO	L: N					<del></del>				•
01	THER CO	NTROLS I	DESCR:	NO CON	ITROL VA	LVE ON C	HILLED W	ATER				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/10/94 PREPARED BY: AJNCWW LOCATION: FT. RILEY, KS

EMC NO: 1406-001

BUILDING NUMBER: 74	04 IU-2 AHU LOCATION: AHU ROOM N. BSMT
REFRIG SYS # SRVNG AHU:	SERVES AREA: NORTH HALF OF BLDG  % OF BLDG AREA HEATED: 0
AHU UNIT TYPE MULTI ZONE	NUMBER OF ZONES IF MZ UNIT: 6
CFM-HTG:	0 CFM-CLG: 28,225
MIN %OA: NAMEPLATE	0 MAX %OA:0
	HAM BUSH UNIT MODEL: MZ-320-D
SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:	7.5 RET/EXH FAN HP: 0  RET/EXH FAN MTR MFG: RET/EXH FAN MTR MODEL:
COILS	
Coil	Coil Type Modulating Valve?
PREHEAT COIL: NON HEATING COIL: NON REHEAT COIL: NON HUMIDIFIER: NON	E D
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 10 SCHEDULE COMMENTS:	MONTH SCHEDULE NO: 2
PRES STOP: 24 24	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF CONTROLS	: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC	COLD DECK DEG F: 0
PRESENT TEMP SUM OCC PRESENT TEMP SUM UNOCC	O OTHER SETPOINT DESCRIP:
MIN OA DMPR CONTROL: N MAX OA DMPR CONTROL: N RET AIR DMPR CONTROL: N EXH AIR DMPR CONTROL: N	ECONOMIZER DB CONTROL: N TIME CLOCK:  ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?
OTHER CONTROLS DESCR	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: AJNCWW

BUILDING NUMB	ER: 7404				BOILER	RM LOC	ATION:	NORTH	MER EAS	T
BOILER UNIT	Ī									
SOURCE OF BLD	OC HEAT	BLR/CON	VERTER S	SERVES AR	EA OR S	ERVICE:	ALL			
	DO FICAT									
● ☑ BOILER	===				ONVERT					
BOILER T		) 250 DEC)			VERTER	=				-
FUEL TY		250 DEG)	·	· ·	VERTER V HT SO	-				
	IL. NAT. OAG				V 111 30					
CENTRAL PL	ANT DIRECT									
NAMEPLATE				% AREA HE	ATED B	Y BB RAI	DIATION:			100
BOILER MFG: BUF	RNHAM			BLR C	AP OUTI	PUT (BTU	JH):		2,568,000	)
UNIT MODEL: 4FL	345-45-LB		or many ma			PUT (BTU		<del></del>	3,210,000	=
COMMENTS:										
SCHEDULE										
DAYS SCHEDULE	NO: 10		3.000			MONTI	H SECHE	ULE NO:		1
SCHEDULE COMMEN	ITS:									
	SUN: MON:	: TUE:	WED:	THUR:	FRI:	SAT:				
PRES START:	0 0		0	0	0	0				
PRES STOP:	2424		24	24	24	24				
REQ START: =	00 2424		<u>0</u> 24	0		0				
REQUIOF.					24	24				
	FEB: MAR:	APR:	MAY: JI	UN: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	mysem =
ON:		$\boxtimes$					$\boxtimes$		$\boxtimes$	
CONTROLS										
TYPE OF BL	R CONTROLS:	PNEUM	ATIC			RESE	T CONTE	ROLS: [	Y	
OPERATI	NG SETPOINT:	:	0 DE	G F or PSIG				٠. ٢		
TYPE OF BURNE	R CONTROLS:									
CONTROL	S COMMENTS:	: [								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: AJNCWW

BUILDING NUMBER:  BOILER UNIT	7404			BOILER	RM LOC	ATION:	NORTH	MER WES	Τ
—SOURCE OF BLDG H		R/CONVERTE	R SERVES AR	EA OR SE	RVICE:	DHW			
BOILER TAG: BOILER TYPE: FUEL TYPE:		EAM (15# TO 125	#) CON	CONVERTE NVERTER IVERTER	TAG:				
CENTRAL PLANT	DIRECT								
NAMEPLATE			% AREA H	EATED BY	BB RAI	DIATION:			0
BOILER MFG: KEWANE M-65-KG COMMENTS: KEWANE M-65-KG	E			CAP OUTP		,		650,000 813,000	=
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	10				MONTH	SECHD	ULE NO		3
PRES START: () PRES STOP: 24 REQ START: () REQ STOP: 24	0 0 24 0 0	24 24	0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FRI:  0 24 0 24	SAT: 0 24 0 24				
MONTHS JAN: FEB: ON:	MAR: AF	PR: MAY:	JUN: JUL:	AUG:	SEP:	ост:	NOV:	DEC:	
CONTROLS									
TYPE OF BLR CO OPERATING S TYPE OF BURNER CO	ETPOINT:	LECTRIC 12 [	DEG F or PSIG	<b>i</b>	RESE	T CONTR	ROLS: [	N	
CONTROLS CO	MMENTS:								!

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**DATE**: 10/10/94

PREPARED BY: AJNCWW

#### PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUI	MBER:	7404				BLDG N	NAME:	ENL BAR	RACKS	W/O DIN			
PER RAD	(SYSTEN	TAG) NO:	RAD-	1	- 27 - 1000-11 - 100		RAD	SYS LOCA	TION:	NORTH M	IER SOU	тн	
		HEATING:	EC	1				SERVES A	AREA:	ALL			
RAD	IATION L	JNIT TYPE:	HW					% AREA	HTG:		10	0	
RADIA	TION	PUMP											
PUMP 1	ΓAG: 1			PUN	IP HP:		2	PUMP	MFG:	MARATH	ON ELEC	TRIC	
								PUMP M	ODEL:	YVD 145.			
RADIA [*]	TION	PUMP											
PUMP 1	Γ <b>AG</b> : 2			PUN	IP HP:		2	PUMP	MFG:	MARATH	ON ELEC	CTRIC	
								PUMP M	ODEL:	PC56T			
SCHED	ULE												
DA	YS SCH	EDULE NO:		10	<u></u>	MO	NTHS S	SCHEDULE	E NO:		1		
SCHE	DULE C	OMMENTS:											
			MON:	TUE			IUR:	FRI:	SAT:				
PRES S		0 =	0				0	0	24				:
REQ S	STOP:	24	24	24	===	24 0	<u>24</u> 0	=	0				
	STOP:	24	24	24		24	24	24	24				
MONTHS	JAN:	FEB: N	MAR:	APR:	MAY:	JUN:	JUL	.: AUG:	SEP	: OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$						$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTR	ROLS												
TY	PE OF R	AD. CONTI	ROLS:	PNEUI	MATIC								
	RADIA	TION CON	rrol:	3-WAY	' VALVE	Ē							
	oc	C HT SPAC	E SP:		0								
		C HT SPAC		:	0			F	RESET (	CONTROL	: N		
	CONTR	OL COMM	ENTS:										

## ${\bf E}\ {\bf M}\ {\bf C}$ ENGINEERS, INC.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

FILE:

AJN AJN

CHECKED BY:

7404.XLS

AHU NO.:	AHU-1	LOCATIO	N (Rm) MER B	ASEMENT				
AHU TYPE:	MZ	MFG.:	DUNHAM BUSH		MODEL:	MZ-320-D		
SZ - Single Zone		ating & Vntltng		n Coil (Indicate :	2P for 2 Pipe or	4P for 4 Pipe	e)	
MZ - Mulitzone	r	able Air Vol.	•	Reheat System	,	•	,	
DD - Dual Duct	UH - Unit I			duction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
COMMENTS:	TYPICAL	OF 6 ZONE D	DAMPERS				DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
					-			
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:		•						
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN				
COMMENTS:								
OOMINETTI O.								
		-						
COOLING COIL	][N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	NONE	RP- ACT:	RP-BD
COOLING COIL HEATING COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	NONE OK:	RP- ACT:	RP-BD
COOLING COIL HEATING COIL PREHEAT COIL								RP-BD
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	
HEATING COIL PREHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	ок: ок: ок:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD

7404

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7404

FILE:

7404.XLS

	AIR	HANDLIN	IG UNIT - HVAC	UPGRADE	OBSERVA	TIONS		
AHU NO.:	AHU-2	LOCATIO	N (Rm) MER	BASEMENT				
AHU TYPE:	MZ	MFG.:	DUNHAM BUSH		MODEL:	MZ-320-D		
SZ - Single Zone	H&V - Hea	ating & Vntltno	j. FC - I	an Coil (Indicate:	2P for 2 Pipe or	4P for 4 Pipe	<del>)</del>	
/IZ - Mulitzone	VAV - Var	iable Air Vol.	RHT	- Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND -	Induction System				
D.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
COMMENTS:	TYPICAL	OF 6 ZONE [	DAMPERS				DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
ILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:	IIVA.	JON. A	INEFLACE:	JOIZE.				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		01 - 14t
COMMENTS:								······································
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	(NONE)	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	Actuator
			***************************************				RP-BD = Replace	Body
							W 101	
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
				<u> </u>				
PIPE INSULATION	MNI/A :	IOV: V	IMICCINIC	IFATUALT.	ED OLIANTITY			
	N/A:	OK: X	MISSING:		ED QUANTITY:			
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7404

FILE:

7404.XLS

	BOILE	K & CUN	VERTER - H	IVAO OI	GIVADI	- ODOLIN	MIIOITO		
BOILER/CONVERTER NO	),	BLR-1	LOCATION (F	RM)	MER				
BOILER TYPE:		HW		BURNHAM		MODEL:	4-FL-345-4	15-LB	
CONVERTER TYPE:			MFG.:			MODEL:			
STM - Steam			t Water Conv.			M - High Tem	•		
HW - Hot Water			o. HW to HW Cv.		1	mestic Hot W			
BOILER BURNER	ATMOSPI	HERIC:	POWER:	Х	OK:	Χ	REPLACE		
COMMENTS:			- HATER .						
		<del></del>							
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	-	SIZE:	****			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:				
COMMENTS:									
BLR INSULATION	N/A:	OK: X	MISSING:		ESTIMAT	ED QUANTIT	Y:		
						ED QUANTIT	V.	28'@ 6" DIA	
PIPE INSULATION	N/A:	OK:	MISSING:	X	ESTIMAT	ED QUANTIT	۲:	20000000	
	N/A:	JOK:	MISSING:	X	ESTIMAT	ED QUANTII	Υ.	20 @ 0 0 0	
COMMENTS:  HW PUMP MOTOR	N/A:	ок: х	REPLACE:	X	SIZE:		T BOLTED TO		
COMMENTS:  HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK: X	REPLACE:	X	SIZE:	2 HP (NO			
COMMENTS:  HW PUMP MOTOR	N/A:	ок: х	REPLACE:	X	SIZE:				
COMMENTS:  HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A:	OK: X OK: X	REPLACE:	X	SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: X	OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO			
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO ⁻	T BOLTED TO		
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	2 HP (NO	T BOLTED TO		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

FILE:

7404.XLS

	BOILE	R & CON	IVERTER - HVAC U	PGRADE OBSERVATIONS
BOILER/CONVERTER NO	).	BLR-2	LOCATION (RM)	MER
BOILER TYPE:		STM	MFG.: KEWANEE	MODEL: M-65-KG
CONVERTER TYPE:			MFG.:	MODEL:
STM - Steam			t Water Conv.	:HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water			o. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSPI	HERIC:	POWER: X	OK: X REPLACE:
COMMENTS:	DOMEST	IC HW USE C	NLY FEEDS 2 LARGE CON	V/STOR TANKS
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
DI D INCHI ATION	16x17A : V	lok	IMICONO.	TEGTIMATED OLIVITATIV
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				THE CANADA
				Water and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second se
HW PUMP MOTOR	N/A: X	lok:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	lok:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:	10/7. /	1011.	INCI DAOL.	OIZE.
OGNINILIATO.			T	
**************************************				
CV PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: 1/25 HP
CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
COMMENTS:		1		1
		***************************************		
CV INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
COMMENTS:		17/	1	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
COMMENTO.				

7404

BLDG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/10/94
PREPARED BY: AJN/CWW

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7612 BLDG NAME: ENL BARRACKS W/AS

ELECTRIC METER: N

GAS METER: Y
SUSPECT ACM: Y

CONDITIONED SQFT: 41,892

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

FRI: SAT: SUN: MON: TUE: WED: THUR: 0 0 0 0 0 PRES START: 0 0 24 PRES STOP: 24 24 24 24 0 0 0 0 0 0 0 **REQ START:** 24 24 24 24 24 24 24 REQ STOP:

#### **REMARKS:**

Suspect ACM located on pipe fittings

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

NTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: AJN/CWW

_			OEIXV/XIIOIXO
	BUILDING NUMBER:	7612	
	AHU NUMBER:	AHU-1 AHU LOCATIO	N: MER
	REFRIG SYS # SRVNG AHU	J: CH-1 SERVES AREA	: HALLWAYS
		% OF BLDG AREA HEATED	:5
	AHU UNIT TYPE SINGLE	ZONE	SUMBER OF ZONES IF MZ UNIT: 0
	CFM-HTG:	3,500 CFM-CLG	: 3,500
	MIN %OA:	100 MAX %OA	
١	NAMEPLATE		
	UNIT MFG:	U	NIT MODEL:
	SUPPLY FAN HP:		XH FAN HP: 0
	SUPPLY FAN MTR MFG:	CENTURY RET/EXH FAN	NMTR MFG:
	SUPPLY FAN MTR MODEL:	3-331260-03 <b>RET/EXH FAN M</b>	TR MODEL:
	COMMENTS:		
2	COILS		
	Coil	Coil Type Modulating	g Valve?
	PREHEAT COIL:	NONE	
	HEATING COIL:	DUAL TEMP WATER	
	REHEAT COIL:	NONE	
	HUMIDIFIER: 1	NONE	
	COOLING COIL: 1	NONE	
S	CHEDULE		
	DAY SCHEDULE NO:	10	MONTH SCHEDULE NO: 3
	SCHEDULE COMMENTS:		
	SUN: N	MON: TUE: WED: THUR: FRI:	SAT:
	PRES START: 0	0 0 0 0 0	0
	PRES STOP: 24	24 24 24 24 24	24
	REQ START: 0	0 0 0 0	0
	REQ STOP: 24	24 24 24 24 24	24
Ņ		AR: APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
	ON:		
2	CONTROLS		
	TYPE OF CONTRO	DLS: PNEUMATIC THERI	MOSTAT TYPE: OTHER
	PRESENT TEMP WINTR O	OCC:   0	T DECK DEG F: 0
	PRESENT TEMP WINTR UNC	OCC: 0 COLI	D DECK DEG F: 0  KED AIR DEG F: 0
	PRESENT TEMP SUM C		(ED AIR DEG F: 0
	PRESENT TEMP SUM UNC		POINT DEG F: 0
	MIN OA DMPR CONTROL:	N MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?
	MAX OA DMPR CONTROL:	Y ECONOMIZER DB CONTROL: N	
	RET AIR DMPR CONTROL:	N ECONOMIZER WB CONTROL: N	
	EXH AIR DMPR CONTROL:	N	
	OTHER CONTROLS DES	SCR:	
	CONTROLS COMMEN		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

**DATE:** 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER			L MED ACT EL		<del></del> .
AHU NUMBER	K: AHU-2	AHU LOCATION		N	
REFRIG SYS # SRVNG A		SERVES AREA: BLDG AREA HEATED:	HALLWAYS		5
AHU UNIT TYPE SINGL	E ZONE	NU	MBER OF ZON	ES IF MZ UNIT	: 0
CFM-HTG:	3,500	CFM-CLG: MAX %OA:		3,500 100	
MIN %OA: NAMEPLATE	100	WAX %OA.		100	
			THORE		
UNIT MFG:	4		IT MODEL:		<u> </u>
SUPPLY FAN HP:	DAYTON.	RET/EXH FAN	H FAN HP:		
SUPPLY FAN MTR MFG:		RET/EXH FAN MT	<del></del>		
SUPPLY FAN MTR MODEL: COMMENTS:	3N450	REI/EAR FAN WII	R MODEL.		<del></del>
COILS					
Coil	Coil Type	Modulating '	Valve?		
PREHEAT COIL:	NONE				
HEATING COIL:	DUAL TEMP WATER				
REHEAT COIL:	NONE				
HUMIDIFIER:	NONE				
COOLING COIL:	CW				
	CW				
	10		MONTH SCH	EDULE NO:	3
SCHEDULE			MONTH SCH	EDULE NO:	3
SCHEDULE  DAY SCHEDULE NO:		: THUR: FRI:	MONTH SCHI	EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS:	10			EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN:	10 MON: TUE: WED	0 0	SAT:	EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START:  0	10 MON: TUE: WED 0 0 0	0 0 0 24 24	SAT:	EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24	10  MON: TUE: WED  0 0 0  24 24 24	0 0 0 1 24 24 0 0 0	SAT: 0 24	EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24	10  MON: TUE: WED  0 0 0  24 24 24  0 0 0  24 24 24	0 0 0 1 24 24 0 0 0	SAT: 0 24 0	EDULE NO:	
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	10  MON: TUE: WED  0 0 0  24 24 24  0 0 0  24 24 24  MAR: APR: MAY:	0 0 0 4 24 24 0 0 0 0 1 24 24 JUN: JUL: AUG:	SAT: 0 24 0 24 SEP: OCT:	NOV: DE	<b>C</b> :
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	10  MON: TUE: WED  0 0 0  24 24 24  0 0 0  24 24 24	0 0 0 4 24 24 24 24 24 24 24 24 24 24 24	SAT: 0 24 0 24		<b>C</b> :
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	10  MON: TUE: WED  0 0 0  24 24 24  0 0 0  24 24 24  MAR: APR: MAY:  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 24 SEP: OCT:	NOV: DE	C:
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START: PRES STOP: PRES STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ S	10  MON: TUE: WED  0 0 0  24 24 24  0 0 0  24 24 24  MAR: APR: MAY:  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT:  0 24  0 24  SEP: OCT:  SEP: DECK DEG F:	NOV: DE	<b>C</b> :
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START: PRES STOP: PRES STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ STOP: PREQ S	10  MON: TUE: WED  0 0 0  24 24 24  0 0 0  24 24 24  EMAR: APR: MAY:  □ □ □ □ □  ■ □ □ □ □  ■ □ □ □ □  ■ □ □ □ □	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT:  0 24 0 24  SEP: OCT:	NOV: DE	C:
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START: OPRES STOP: PREQ START: OREQ STOP: ON:  TYPE OF CONT PRESENT TEMP WINTE LEAD	MON: TUE: WED  0 0 0 24 24 24 20 24 24  MAR: APR: MAY:    X   X   X      TROLS: PNEUMATIC  R OCC:   INOCC:	0 0 0 0 1 1 24 24 24 24 24 24 24 24 24 24 24 24 24	SAT:  0 24  0 24  SEP: OCT:  SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F:	NOV: DE	C: ]
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START: PRES START: PRES STOP: PRES STOP: PREQ START: OREQ STOP: ON: TYPE OF CONTROLS	MON: TUE: WED  0 0 0 24 24 24 24 24 24 24  0 0 0  TROLS: PNEUMATIC  R OCC:  NOCC:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT:  0 24  0 24  SEP: OCT:  SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F:	NOV: DE	C: ]
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START: PRES START: PRES STOP: PRES STOP: PREQ STOP: PREQ STOP: PRESENT TEMP WINTE PRESENT TEMP SUITE	MON: TUE: WED  0 0 0 24 24 24 20 24 24  MAR: APR: MAY:	0	SAT:  0 24  0 24  SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: D	NOV: DE	C: ] 0 0
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START: OPRES STOP: PRES STOP: PREQ START: OREQ STOP: ON:  TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP SUM UPRESENT TEMP SUM U	MON: TUE: WED  0 0 0 24 24 24 24 24 24 24  MAR: APR: MAY:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT:  0 24  0 24  SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: D	NOV: DE  OTHER  DEMAND LIMI	C: ] 0 0
DAY SCHEDULE NO: SCHEDULE COMMENTS:  PRES START:  PRES START:  PRES STOP:  PREQ START:  REQ START:  O REQ STOP:  Z4  MONTHS JAN: FEB: ON:  TYPE OF CONT  PRESENT TEMP WINTE  PRESENT TEMP WINTE  PRESENT TEMP SUM LE  MIN OA DMPR CONTROL	MON: TUE: WED  0 0 0 24 24 24 24 24 24 24  EMAR: APR: MAY:    X   X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X     X	0 0 0 0 1 24 24 24 24 24 24 24 24 24 24 24 24 24	SAT:  0 24  0 24  SEP: OCT:  SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DESCRIP: POINT DES F:	NOV: DE  OTHER  DEMAND LIMI	C:  O O O O T CNTRLS?
DAY SCHEDULE NO: SCHEDULE COMMENTS:  SUN: PRES START: PRES STOP: PRES STOP: PREQ START: OREQ STOP: ON: PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM L MIN OA DMPR CONTROL MAX OA DMPR CONTROL	MON: TUE: WED  0 0 0 24 24 24 24  0 0 0 24 24 24  EMAR: APR: MAY:  □ □ □ □ □ □  □ □ □ □ □  □ □ □ □ □  □ □ □ □ □  □ □ □ □ □  □ □ □ □ □  □ □ □ □ □  □ □ □ □ □  □ □ □ □ □  □ □ □ □ □ □  □ □ □ □ □ □  □ □ □ □ □ □  □ □ □ □ □ □ □  □ □ □ □ □ □ □ □  □ □ □ □ □ □ □ □ □  □ □ □ □ □ □ □ □ □ □ □  □ □ □ □ □ □ □ □ □ □ □ □  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0	SAT:  0 24  0 24  SEP: OCT:  SEP: OCT:  DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DESCRIP: POINT DES F:	NOV: DE  OTHER  DEMAND LIMIT	C:  O O O O T CNTRLS?

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

EMC NO: 1406-001

BUILDING NUM AHU NUM		AHU LOCATION: THROUGHOUT BLDG	
REFRIG SYS # SRVN		SERVES AREA: ALL DG AREA HEATED: 70	
AHU UNIT TYPE FA			_
AND DIGITALE 17	AN COILS - 2 FIFE	NUMBER OF ZONES IF MZ UNIT.	2
CFM-H		<b>CFM-CLG:</b> 41,400	
MIN %	OA:0	MAX %OA:0	
UNIT M	FC.	UNIT MODEL:	
SUPPLY FAN		RET/EXH FAN HP: 0	
SUPPLY FAN MTR M		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MOD	EL:	RET/EXH FAN MTR MODEL:	
COMMEN	TS: TOTAL FOR 92 FAN COILS		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT CO	DIL: NONE		
HEATING CO	DIL: DUAL TEMP WATER		
REHEAT CO			
HUMIDIFII			
COOLING CO	DIL: NONE	<b>U</b>	
SCHEDULE			
DAY SCHEDULE NO	D:10	MONTH SCHEDULE NO:	3
SCHEDULE COMMENTS	S:		-
SUN	N: MON: TUE: WED: T	HUR: FRI: SAT:	
	0 0 0 =	00	
PRES STOP: 2		24 24 24	
	$\frac{0}{4} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	$\frac{0}{24} \frac{0}{24} \frac{0}{24}$	
NEW OTOT	7 24 24 24	24 24 24	
MONTHS JAN: FEB ON:	: MAR: APR: MAY: JUN	: JUL: AUG: SEP: OCT: NOV: DEC:	
CONTROLS			
TYPE OF CO	ONTROLS: ELECTRIC	THERMOSTAT TYPE:	
PRESENT TEMP W	INTR OCC: 0	HOT DECK DEG F: 0	
PRESENT TEMP WINT	R UNOCC: 0	COLD DECK DEG F: 0  MIXED AIR DEG F: 0	
PRESENT TEMP	SUM OCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SU		OTHER SETPOINT DEG F: 0	
MIN OA DMPR CONT	ROL: N MIXED AIR DMPI	R CONTROL: N IMPLEMENT DEMAND LIMIT CNTR	LS? N
MAX OA DMPR CONT	ROL: Y ECONOMIZER DI		
RET AIR DMPR CONT	ROL: N ECONOMIZER WI		
EXH AIR DMPR CONT	ROL: N		
OTHER CONTROL	S DESCR:		
CONTROLS CO	OMMENTS:		-

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: AJN/CWW

BUILDING NUM	BER: 7612	2				BOILER	RM LOCA	ATION:	MER		
BOILER UNI	T										
		BL	R/CONV	ERTER SE	RVES ARE	A OR S	RVICE:	ALL			
SOURCE OF BL	DG HEAT										
● ⊠ BOILER						DNVERT	ER _				
BOILER				1		VERTER	≒				
BOILER T	<u>`</u>	UP TO 250	DEG)			ERTER	_				
FUEL T	YPE: NAT.	GAS		i	CON	/ HT SOI	JRCE:				
CENTRAL F	PLANT DIRE	СТ									
NAMEPLATI	E			%	AREA HE	ATED B	/ BB RAD	DIATION:			20
BOILER MFG: KE	EWNNEE			_	BLR C	AP OUTF	UT (BTU	H):		2,350,000	_
UNIT MODEL:				-	BLR	CAP INF	UT (BTU	H):		2,938,000	-
COMMENTS:											
SCHEDULE											<u>-</u> :
CHEDULE											
DAYS SCHEDULE SCHEDULE COMME		10					MONTH	SECHD	ULE NO:	<u> </u>	
	SUN: I	MON:	TUE:	WED: T	HUR:	FRI:	SAT:				
PRES START:		0	0			0 =	0				
PRES STOP:	$\frac{24}{2}$	24	24	24 =	$\frac{24}{0} =$	24	<u>24</u> 0				:
REQ START: REQ STOP:	24	24	24	24	0 		24				:
REQUIOF.											_:
MONTHS JAN:	FEB: M	AR: A	PR: M	AY: JUN	: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-
ON:										×	
CONTROLS				-10							
TYPE OF E	BLR CONTR	OLS: F	PNEUMAT	ГІС			RESE	T CONTE	ROLS:	Υ	
OPERA'	TING SETP	OINT:		0 DEG I	F or PSIG						
TYPE OF BURN	IER CONTR	OLS:									
CONTRO	LS COMME	NTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO**: 1406-001

**DATE:** 10/10/94

PREPARED BY: AJN/CWW

BUILDING NUMBER: 7612	BOILER RM LOCATION: MER
BOILER UNIT	
SOURCE OF BLDG HEAT	R SERVES AREA OR SERVICE: DHW
BOILER BOILER TAG: BLR-2 BOILER TYPE: MED PRESS STEAM (15# TO 125# FUEL TYPE: NAT. GAS	CONVERTER CONVERTER TAG: CONVERTER TYPE: CONV HT SOURCE:
CENTRAL PLANT DIRECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION: 0
BOILER MFG: OSAGE UNIT MODEL: 60-15  COMMENTS:  SCHEDULE	BLR CAP OUTPUT (BTUH):         1,939,200           BLR CAP INPUT (BTUH):         2,424,000
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:	MONTH SECHDULE NO: 1
SUN:         MON:         TUE:         WED:           PRES START:         0         0         0         0           PRES STOP:         24         24         24         24           REQ START:         0         0         0         0           REQ STOP:         24         24         24         24	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
MONTHS JAN: FEB: MAR: APR: MAY: ON:     ON:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF BLR CONTROLS: PNEUMATIC  OPERATING SETPOINT: 10 D  TYPE OF BURNER CONTROLS:  CONTROLS COMMENTS:	RESET CONTROLS: N DEG F or PSIG
CONTINUED COMMENTS.	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: AJN/CWW

BUILDING NUMBER: 7612 BOILER RM LOCATION: MER	
OILER UNIT	
BLR/CONVERTER SERVES AREA OR SERVICE: ALL	
—SOURCE OF BLDG HEAT ————————————————————————————————————	
● ⊠ BOILER ☐ CONVERTER	
BOILER TAG: CONVERTER TAG:	
BOILER TYPE: CONVERTER TYPE:	
FUEL TYPE: CONV HT SOURCE:	
C OFFITPAL BLANT PIPEOT	
CENTRAL PLANT DIRECT	
AMEPLATE % AREA HEATED BY BB RADIATION:	
BUR CAP OUTPUT (BTUH):	
BLR CAP OUTPUT (BTUH):  UNIT MODEL:  BLR CAP INPUT (BTUH):	
UNIT MODEL:	
COMMENTS:	
CHEDITE	<del>-</del>
CHEDULE	
DAYS SCHEDULE NO: 10 MONTH SECHDULE NO:	3
CHEDULE COMMENTS:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0 0 0 0	
PRES STOP: 24 24 24 24 24 24 24	
REQ START: 0 0 0 0 0 0 0	I
REQ STOP: 24 24 24 24 24 24 24	
ONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC	<del>:</del> :
ONTROLS	
UNIKOL3	
TYPE OF BLR CONTROLS: ELECTRIC RESET CONTROLS: N	
OPERATING SETPOINT: DEG F or PSIG	
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	
W PUMP	
PUMP TAG: DTWP-1 PUMP HP: 2 PUMP MFG: CENTURY	
PUMP TAG: DTWP-1 PUMP HP: 2 PUMP MFG: CENTURY PUMP SERVICE: DUAL TEMP PUMP PUMP PUMP PUMP MODEL: SC-184-KMA	
W PUMP	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: AJN/CWW

HW PUMP					
PUMP TAG:	DTWP-3	PUMP HP:	1.5	PUMP MFG:	CENTURY
PUMP SERVICE:	DUAL TEMP PUMP			PUMP MODEL:	SC-164 KMA
HW PUMP					
PUMP TAG:		PUMP HP:	3	PUMP MFG:	CENTURY
PUMP SERVICE:	DUAL TEMP PUMP			PUMP MODEL:	SC-213-FMA

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: AJN/CWW

## PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUMBER:	7612			-	BLDG	NAME:	ENL BAF	RACKS	W/AS			
PER RAD (SYSTE		RAD-	.1	:			YS LOCA		VESTIBU	LES, TOI	LETS	- 13 (44) (44) (44)
·	F HEATING:	×	1			\$	SERVES A	AREA:				
RADIATION	UNIT TYPE:	HW					% AREA	HTG:		2	0	
RADIATION	PUMP	ı										
PUMP TAG: 1			PUM	P HP:		0.5	PUMP	MFG:	RELIANC	E		
_							PUMP M	ODEL:	442775-G	T		
SCHEDULE												
DAYS SCH	EDULE NO:		10	-    -	МО	NTHS S	CHEDULE	NO:		1		
SCHEDULE C	OMMENTS:											
	SUN:	MON:	TUE			HUR:	FRI:	SAT:				
PRES START:	0	0	C	·			0	0				
PRES STOP:	24	24	24	·	24	24	24	24				
REQ START:	0	0				0	0	0				
REQ STOP:	24	24	24		24	24	24	24				
MONTHS JAN:	FEB: N	IAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-
ON:	$\boxtimes$		$\boxtimes$						$\boxtimes$		$\boxtimes$	
CONTROLS												
TYPE OF I	RAD. CONTR	ROLS:										
RADIA	ATION CONT	ROL:	NONE									
oc	C HT SPAC	E SP:		0								
UNO	C HT SPAC	E SP:		0			F	RESET C	ONTROL:	N		
CONT	ROL COMME	ENTO.	2 M/AV	DNELI	MATIC	ONTOOL	VALVE	INI NAED				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: AJN/CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER:	7612	BL	DG NAME:	ENL BARRA	CKS W/A	S			
REF. UNIT NUMBER	R/TAG: CH-1			LOCA	ATION (ME	ER#):	MER		
	<del></del>				HU'S SER'		ALL		
	UNIT TYPE F	RECIPROCATING	WITH AIR C	COOLED CON	IDENSING	UNIT			
NAMEPLATE	<b>E</b>								
CHILLER N	/IFG: TSI			TOWE	R MFG:	ΓSΙ			
CHILLER MOI	DEL: SC2CD7	0		# OF TOWER	FANS:			6	
CHILLER SERIAL	NO:			TOWER	FAN V: 📱			0	
CHILLE	R V:	0	•	TOWER FAN	=			0	
CHILLER AN	MPS:	0		TOWER F	AN HP:		#17 A.L. M	1	
CHILLER		0							
CHILLER CAP (TO	NS):	70							
COMME	NTS:								
SCHEDULE									
DAYS SCHE	DULE NO:	10		MONTHS	SCHEDUL	E NO:	2		
SCHEDULE CO	MMENTS:								_
:	SUN: MON	: TUE: W	D: THUR	: FRI:	SAT:				
PRES START:		00		00	0				
PRES STOP:	24 24		24 2	= ==== :	24				
REQ START:		00		0 0	0				
REQ STOP:	24 24	4 24	24 2	4 24	24				_
MONTHS JAN:	FEB: MAR:	APR: MAY:	JUN:	JUL: AUG	SEP:	OCT	: NOV:	DEC:	-
ON:			$\boxtimes$	$\boxtimes$	$\boxtimes$				
CONTROLS									=
TYPE OF C	CONTROLS: P	NEUMATIC							
cws	SETPOINT:		0	CNWS SE	TPOINT			<u> </u>	
	SETPOINT:		55	CNWR SE				0	
	_	TT							
	<u> </u>	=	IP LITE HI:		THER IND	CATIO	RS:		
	= = = = = = = = = = = = = = = = = =		LITE LOW:						
	LS COMMENTS		GAUGES:	LN]					
									نـ
CW and CNV	V PUMPS	5							
PUMP TAG: 1		PUMP HP:	1.9	5 PU	MP MFG:	AURO	)RA		
PUMP SERVICE: CV	V PUMP (Chilled	Water)		PUMP	MODEL:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY: 7612 FILE: 7612.XLS

	AIR	HANDLIN	G UNIT - HVA	C UPGRADE	OBSERVA [*]	<b>FIONS</b>		
AHU NO.:	FC-1	LOCATIO	N (Rm) IN	EACH ROOM				
AHU TYPE:	FC 2P	MFG.:			MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltng	•	- Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		T - Reheat System				
DD - Dual Duct	UH - Unit	Heater	,INI	- Induction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	TYPICAL	OF 92 FAN C	OIL UNITS				DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK. X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	ЛОК: Х	IREPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
INLET VANES	N/A: X	IOK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	ICOMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN				
COMMENTS:	Or	INEI EXOL		Toommen	110.			
COMMENTS:	<u></u>		,		, m,			
						Nov. va	IDD 107	Inn nn
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: N/A	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: N/A	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replac	
							RP-BD = Replace	Body
			V-1		<u>-</u>			
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
OCIVIIVILIATO.							<del></del>	
PIPE INSULATION	N/A:	OK: X	MISSING:	1	red Quantity:			
DUCT INSULATION	N/A: X	OK:	MISSING:	ESTIMA"	FED QUANTITY:			·
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

						CHECKE		A
			BLDG:	7612		FILE:	7612.XLS	
	AIR I		IG UNIT - HVAC		OBSERVA	TIONS		· · · · ·
AHU NO.:	AHU-1	LOCATIO		FLOOR MER				
AHU TYPE:	SZ	MFG.:	CENTRAL AIR		MODEL:	L0815		
SZ - Single Zone	H&V - Hea	ating & Vntltn	g. FC -	Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	9)	
MZ - Mulitzone		iable Air Vol.		- Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND	<ul> <li>Induction System</li> </ul>				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
			T-17					
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE	<u>:</u> :	COMMEN	ITS:			<del> </del>
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	Ок:	REPLACE		COMMEN		N/A		
COMMENTS:				1			<del></del>	·
							1	
Mary Mary Mary Mary Mary Mary Mary Mary								
COOLING COIL	N/A:	ЮК: X	IREPLACE:	SIZE:	CNTLVLV	(NONE)	IRP- ACT:	IRP-BC
COOLING COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	(NONE)	RP- ACT:	
COOLING COIL HEATING COIL				SłZE:	CNTLVLV	OK:	RP- ACT:	RP-BC
COOLING COIL HEATING COIL PREHEAT COIL	N/A: X	OK:	REPLACE:				RP- ACT:	RP-BC
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
	N/A: X N/A: X	OK:	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X	OK:	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG:

7612

FILE: 76

7612.XLS

HUTYPE: SZ	AHU NO.:	AHU-2	LOCATIO	N (Rm) 1ST FI	OOR MER		<u> </u>		
SZ - Single Zone				` '	OOKWILK	MODEL:			
MZ - Mulitzone					n Coil (Indicate		4P for 4 Pin	<u>e)</u>	
DD - Dual Duct					•	21 101 2 1 1p0 01	11 101 11 1p	0,	
O.A. DAMPER         N/A;         OK: X         REPLACE;         SIZE;         DPR-ACT         OK; X         RP-ACT;           R.A. DAMPER         N/A; X         OK;         REPLACE;         SIZE;         DPR-ACT         OK;         RP-ACT;           E.A. DAMPER         N/A; X         OK;         REPLACE;         SIZE;         DPR-ACT         OK;         RP-ACT;           F. & B. DAMPER         N/A;         OK;         REPLACE;         SIZE;         DPR-ACT         OK;         RP-ACT;           ZONE DAMPER         N/A;         OK;         REPLACE;         SIZE;         DPR-ACT         OK;         RP-ACT;           ZONE DAMPER         N/A;         OK;         REPLACE;         SIZE;         DPR-ACT         OK;         RP-ACT;           ZONE DAMPER         N/A;         OK;         REPLACE;         SIZE;         DPR-ACT         OK;         RP-ACT;           ZONE DAMPER         N/A;         OK;         REPLACE;         SIZE;         DPR-ACT         OK;         RP-ACT;           ZONE DAMPER         N/A;         OK;         REPLACE;         SIZE;         COMMENTS;         DPR-ACT         OK;         RP-ACT;         RP-ACT;         RP-ACT;         RP-ACT;         RP-ACT;         RP-AC					•	l			
R.A. DAMPER							OK. X	IRP- ACT	
E.A. DAMPER		- 13	1						
F. & B. DAMPER N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X RP-ACT: ZONE DAMPER N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: COMMENTS: REFERENCE PHOTO FOR AHU-1  DPR-ACT OK: RP-ACT: RP-ACT- Regisse Adustor RP-ACT- Regisse Activator RP-ACT- RP-BC RETURN AIR FAN OK: REPLACE: COMMENTS: RETURN AIR FAN OK: REPLACE: COMMENTS: COMMENTS:  COOLING COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL NA: OK: R		II	1				H		
ZONE DAMPER			1	1			11	1	
COMMENTS: REFERENCE PHOTO FOR AHU-1  DIFF.ACT = Register Actuator  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = RP-BC  RP-ACT = Register Actuator  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP-BC = Register Body  RP			1		- 1		I1	1	
FILTER SECTION   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:   SUPPLY AIR FAN   OK: X   REPLACE FAN BEARINGS:   COMMENTS:    SUPPLY FAN MOTOR   OK: X   REPLACE:   COMMENTS:    SUPPLY FAN MOTOR   OK: X   REPLACE:   COMMENTS:    INLET VANES   N/A: X   OK:   COMMENTS:    RETURN AIR FAN   OK:   REPLACE:   COMMENTS:    RETURN FAN MOTOR   OK:   REPLACE:   COMMENTS:    COMMENTS:   COMMENTS:    COOLING COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BL    HEATING COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BL    PREHEAT COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BL    REHEAT COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BL    REHEAT COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BL    COMMENTS:   RP-BC   Replace Advastor    RP-BC   Replace Advas									er Actuator
FILTER SECTION   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:   SUPPLY AIR FAN   OK: X   REPLACE FAN BEARINGS:   COMMENTS:    SUPPLY FAN MOTOR   OK: X   REPLACE:   COMMENTS:    SUPPLY FAN MOTOR   OK: X   REPLACE:   COMMENTS:    INLET VANES   N/A: X   OK:   COMMENTS:    RETURN AIR FAN   OK:   REPLACE:   COMMENTS:    RETURN FAN MOTOR   OK:   REPLACE:   COMMENTS:    COMMENTS:   COMMENTS:    COOLING COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BU    REATING COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BU    REHEAT COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BU    REHEAT COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BU    REHEAT COIL   N/A: X   OK:   REPLACE:   SIZE:   CNTLVLV   OK:   RP-ACT:   RP-BU    REHEAT COIL   N/A: X   OK:   REPLACE:   SIZE:   SIZE:   SIZE:   SIZE:    COMMENTS:   RP-ACT-   RP-BU    RP-ACT-   RP-BU    RP-ACT-   RP-BU    RP-ACT-   RP-BU    RP-ACT-   RP-BU    RP-BU - Registore Body    RETIMATED QUANTITY:    DUCT INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:	OOMMENTO.	11212121	1027110101	0117111011		· · · · · · · · · · · · · · · · · · ·		•	
COMMENTS:  SUPPLY AIR FAN								TO NOT HOPILOG	, rotatio
COMMENTS:  SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS:  SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS:  INLET VANES NA: X OK: COMMENTS:  RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS:  RETURN AIR FAN OK: REPLACE: COMMENTS:  COMMENTS:  COMMENTS:  COOLING COIL NA: VA: X REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REPLACE: SIZE: SI	FILTER SECTION	N/A	IOK: X	IREPLACE:	ISIZE:				
SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS:  SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS:  INLET VANES IVA: X OK: COMMENTS:  RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A  RETURN FAN MOTOR OK: REPLACE: COMMENTS:  COMMENTS:  COMMENTS:  COULING COIL IVA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC HEATING COIL IVA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC PREHEAT COIL IVA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC REHEAT COIL IVA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC COMMENTS:  REHEAT COIL IVA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC COMMENTS: RP-BC-Replace Actualty  RP-BC-Freplace Body  AHU PUMP MOTOR IVA: X OK: REPLACE: SIZE:  AHU PUMP SEALS IVA: X OK: REPLACE: SIZE:  COMMENTS: SIZE: COMMENTS:  RP-BC-Freplace Body  AHU PUMP SEALS IVA: X OK: REPLACE: SIZE:  COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZ				1	1-:				<del></del>
SUPPLY FAN MOTOR  OK: X REPLACE: COMMENTS:  INLET VANES  NIA: X OK: COMMENTS:  RETURN AIR FAN  OK: REPLACE FAN BEARINGS: COMMENTS:  NIA  RETURN FAN MOTOR  OK: REPLACE: COMMENTS:  COMMENTS:  COMMENTS:  COMMENTS:  COOLING COIL  NIA: V OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  HEATING COIL  NIA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  REHEAT COIL  NIA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  REHEAT COIL  NIA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  REHEAT COIL  NIA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  COMMENTS:  RP-ACT: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  RP-BD = Replace Advantor  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD =	OUNINELINIO.								
SUPPLY FAN MOTOR  OK: X REPLACE: COMMENTS:  INLET VANES  NIA: X OK: COMMENTS:  RETURN AIR FAN  OK: REPLACE FAN BEARINGS: COMMENTS:  NIA  RETURN FAN MOTOR  OK: REPLACE: COMMENTS:  COMMENTS:  COMMENTS:  COMMENTS:  COOLING COIL  NIA: V OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  HEATING COIL  NIA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  REHEAT COIL  NIA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  REHEAT COIL  NIA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  REHEAT COIL  NIA: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  COMMENTS:  RP-ACT: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BC  RP-BD = Replace Advantor  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD =	SUPPLY AIR FAN	JOK∙ X	REPLACE	FAN BEARINGS:	ICOMMEN	NTS ⁻			
INLET VANES							·····		
RETURN AIR FAN OK: REPLACE: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS:  COMMENTS:  COOLING COIL N/A: OK: X REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BU HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BU PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BU REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BU REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BU REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BU REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BU RP-BU = Replace Body  AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE:  AHU PUMP SEALS N/A: X OK: REPLACE: SIZE:  COMMENTS:  PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:  DUCT INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:					LOOMMILI	·····			
RETURN FAN MOTOR  OK: REPLACE: COMMENTS:  COMMENTS:  COOLING COIL  N/A: OK: X REPLACE: SIZE: CNTLVLV  N/A: X OK: REPLACE: SIZE: CNTLVLV  OK: RP- ACT: RP-BL  REHEATING COIL  N/A: X OK: REPLACE: SIZE: CNTLVLV  OK: RP- ACT: RP-BL  REHEAT COIL  N/A: X OK: REPLACE: SIZE: CNTLVLV  OK: RP- ACT: RP-BL  REHEAT COIL  N/A: X OK: REPLACE: SIZE: CNTLVLV  OK: RP- ACT: RP-BL  REHEAT COIL  N/A: X OK: REPLACE: SIZE: CNTLVLV  OK: RP- ACT: RP-BL  RP-ACT: RP-BL  RP-ACT: RP-BL  RP-ACT: RP-BL  RP-ACT: RP-BL  RP-ACT: RP-BL  COMMENTS:  RP-ACT = Replace Actualor  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD = Replace Body  RP-BD					ICOMMEN	JTC.	NI/A		
COOLING COIL    N/A:							IV/A		
COOLING COIL    N/A:		JOK:	REPLACE	:	COMME	V15:			
HEATING COIL	COMMENTS:								
HEATING COIL									
HEATING COIL	00011110 0011	INI/A.	TOV. V	IDEDLACE.	ICIZE.	CMTLV/LV	JOV.	IDD ACT.	IDD DD
N/A: X		II	1	- 1			11		
REHEAT COIL  N/A: X  OK:  REPLACE:  SIZE:  CNTLVLV  OK:  RP-ACT:  RP-BD  RP-BD = Replace Actuator  RP-BD = Replace Body  AHU PUMP MOTOR  AHU PUMP SEALS  N/A: X  OK:  REPLACE:  SIZE:  SIZE:  SIZE:  CNTLVLV  OK:  RP-ACT:  RP-BD  RP-BD = Replace Actuator  RP-BD = Replace Body  DESCRIPTION  N/A: X  OK:  REPLACE:  SIZE:  SIZE:  COMMENTS:  PIPE INSULATION  N/A:  N/A:  OK:  MISSING:  ESTIMATED QUANTITY:  DUCT INSULATION  N/A: X  OK:  MISSING:  ESTIMATED QUANTITY:				1			. II		
RP-ACT = Replace Actuator   RP-BD = Replace Body		II							
AHU PUMP MOTOR				INCLEDIOL.	OIZE.	ONTEVEN	JOIN.		<del>-                                    </del>
AHU PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   AHU PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   COMMENTS:	COMMENTS:								,,
AHU PUMP SEALS  N/A: X  OK: REPLACE: SIZE:  COMMENTS:  PIPE INSULATION  N/A:  OK: X  MISSING: ESTIMATED QUANTITY:  DUCT INSULATION  N/A: X  OK: MISSING: ESTIMATED QUANTITY:								RP-BD = Replace	Body
AHU PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  PIPE INSULATION  N/A: OK: X MISSING: ESTIMATED QUANTITY:  DUCT INSULATION  N/A: X OK: MISSING: ESTIMATED QUANTITY:		<del> </del>	<del></del>						
AHU PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  PIPE INSULATION  N/A: OK: X MISSING: ESTIMATED QUANTITY:  DUCT INSULATION  N/A: X OK: MISSING: ESTIMATED QUANTITY:	ALJU DUMD MOTOD	INI/A. V	IOV:	IDEDLACE:	IQ17E)		<del></del>		<del></del>
COMMENTS:  PIPE INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:  DUCT INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:		III							
PIPE INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY: DUCT INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:	ALIO FUIVIE SEALS		JON.	INEFLACE.	JOILE.				
DUCT INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:	COMMENTO								
DUCT INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:	COMMENTS:								
DUCT INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:	COMMENTS:								
		16.02	Total V	INICONIC	F-0-41111				
	PIPE INSULATION								
	PIPE INSULATION								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

7612 BLDG:

FILE:

7612.XLS

R-WCT = Reciprocating w/ WACCU = Air Cooled Condension MOTOR N/	ater Side Cooling ng Unit A: OK: X	ower Tower	TSI/TSI  R-ACCU = Reciprocation	SEMENT/ACCU OUTSIDE    MODEL: SC2CD70/TAC-73 ing w/ Air Cooled Condensing Unit in w/ Water Side Cooling Tower	
C-WCT = Centrifugal w/ Wate R-WCT = Reciprocating w/ W ACCU = Air Cooled Condensi COMP. MOTOR	r Side Cooling To ater Side Cooling ng Unit A: OK: X	ower Tower	R-ACCU = Reciprocation ASB-WCT = Absorption	ng w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating w/ W ACCU = Air Cooled Condensi COMP. MOTOR   N//	ater Side Cooling ng Unit A: OK: X	Tower	ASB-WCT = Absorption		
ACCU = Air Cooled Condensi	ng Unit A: OK: X			n w/ water Side Cooling Tower	
COMP. MOTOR N/	A: OK: X	/ 1555, 405	UT = COOMING LOWER		
11	1				
COMP. MOTOR			SIZE:		
00145 140705			SIZE:		
COMP. MOTOR N/A		REPLACE:	SIZE:	<u> </u>	
	<u> </u>	REPLACE:			
CT/ACCU FAN MTR N/		L	SIZE:		
CT/ACCU FAN MTR N/		REPLACE:	SIZE:		
CT/ACCU FAN MTR N/		REPLACE:	SIZE:		
COMMENTS: TY	PICAL OF 5 ACC	CU FAN MOTORS			
COOLING TOWER	A. V. TOV	IDED: ACT	Total		
	A: X OK:	REPLACE:	SIZE:		
AIR COOLED COND. N/	A:   ΟΚ: >	REPLACE:	SIZE:		
COMMENTS:					
	A: X OK:	MISSING:		ED QUANTITY:	
CHW PIPE INSUL. N/	A: OK: X	MISSING:	ESTIMAT	ED QUANTITY:	
COMMENTS:					
				1944 g. g. 1944 a	
CHW PUMP MOTOR N/	A: ΟΚ: >	REPLACE:	SIZE:	1.5 HP	
CHW PUMP SEALS N/	A: OK: >	REPLACE:	SIZE:		
CHW PUMP MOTOR N/	A: ΟΚ: >	( REPLACE:	SIZE:	3 HP	
CHW PUMP SEALS N/	A: OK: >	REPLACE:	SIZE:	NEW PUMP INSULATION NEEDED	
CHW PUMP MOTOR N/	A: OK:	REPLACE:	SIZE:		
CHW PUMP SEALS N/	A: OK:	REPLACE:	SIZE:		
CHW PUMP MOTOR N/	A: OK:	REPLACE:	SiZE:		
CHW PUMP SEALS N/	A: OK:	REPLACE:	SIZE:		
COMMENTS:					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE: 7612.XLS

BOILER	R & CON	BLDG:	7612			FILE: 7612.XLS	
BOILER	R & CON'	VEDTED					
		VERIER -	HVAC UP	PGRADE	OBSER\	/ATIONS	
	BLR-1	LOCATION		MER			
	HW	MFG.:	KEWANEE		MODEL:	M-235-KX	
		MFG.:			MODEL:		
STM/HW -	Steam to Hot	Water Conv.	1	HTHW/ST	M - High Tem	p HW to Steam Convertor	
HTHW/HW	- High Temp	. HW to HW Cv	1.	DHW - Do	mestic Hot Wa	ater Convertor	
ATMOSPH	ERIC:	POWER:	Χ	OK:	Χ	REPLACE:	
BOILER HA	AS RUST ON	EXTERIOR.					
	OK:	REPLACE:		SIZE:			
N/A: X	OK:	REPLACE:		SIZE:			
	OK: X	MISSING:					
N/A:	OK: X	MISSING:		ESTIMAT	ED QUANTITY	Y:	
N/A:	IOK: X	REPLACE:		ISIZE:	2 HP		
						INSULATED	
						STED, UNINSULATED	
						**************************************	
						STED, LEAKING, UNINSULA	TED
				<del></del>			
	OK: X	REPLACE:		SIZE:		STED, UNINSULATED, PAD	BROKEN
	OK:	REPLACE:		SIZE:			
N/A:	OK:	REPLACE:		SIZE:			
VALVE BO	DY RUSTED	ON 3-WAY A	BOVE				
COMPRES	SORS			-			
N/A:	OK:	MISSING:					
N/A:	OK:	MISSING:		ESTIMAT	ED QUANTIT	Y:	
	HTHW/HW ATMOSPH BOILER HA  N/A: X  N/A: X  N/A: X  N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	HTHW/HW - High Temp  ATMOSPHERIC:  BOILER HAS RUST ON  N/A: X OK:  N/A: X OK:  N/A: X OK:  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X	STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW CV. ATMOSPHERIC: POWER: BOILER HAS RUST ON EXTERIOR.  N/A: X OK: REPLACE: N/A: X OK: REPLACE:  N/A: OK: X MISSING:  N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: MISSING:	STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv. ATMOSPHERIC: POWER: X BOILER HAS RUST ON EXTERIOR.  N/A: X OK: REPLACE: N/A: X OK: REPLACE:  N/A: OK: X MISSING:  N/A: OK: X MISSING:  N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: MISSING:	STM/HW - Steam to Hot Water Conv. HTHW/ST HTHW/HW - High Temp. HW to HW Cv. DHW - Do ATMOSPHERIC: POWER: X OK: BOILER HAS RUST ON EXTERIOR.  N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: SIZE: N/A: X OK: MISSING: ESTIMAT N/A: OK: X MISSING: ESTIMAT N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: N/A: OK: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/A: N/A: OK: M/	STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp. HW to HW Cv. DHW - Domestic Hot Water ATMOSPHERIC: POWER: X OK: X  BOILER HAS RUST ON EXTERIOR.  N/A: X OK: REPLACE: SIZE: S	STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor ATMOSPHERIC: POWER: X OK: X REPLACE: BOILER HAS RUST ON EXTERIOR.  N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: MISSING: ESTIMATED QUANTITY: N/A: OK: X MISSING: ESTIMATED QUANTITY: N/A: OK: X REPLACE: SIZE: PUMP UNINSULATED N/A: OK: X REPLACE: SIZE: PUMP UNINSULATED N/A: OK: X REPLACE: SIZE: PUMP RUSTED, UNINSULATED N/A: OK: X REPLACE: SIZE: PUMP RUSTED, UNINSULATED N/A: OK: X REPLACE: SIZE: PUMP RUSTED, LEAKING, UNINSULATED N/A: OK: X REPLACE: SIZE: PUMP RUSTED, LEAKING, UNINSULATED N/A: OK: X REPLACE: SIZE: PUMP RUSTED, UNINSULATED N/A: OK: X REPLACE: SIZE: PUMP RUSTED, UNINSULATED, PAD N/A: OK: X REPLACE: SIZE: PUMP RUSTED, UNINSULATED, PAD N/A: OK: X REPLACE: SIZE: SIZE: PUMP RUSTED, UNINSULATED, PAD N/A: OK: X REPLACE: SIZE: SIZE: PUMP RUSTED, UNINSULATED, PAD N/A: OK: REPLACE: SIZE: SIZE: VALVE BODY RUSTED ON 3-WAY ABOVE COMPRESSORS  N/A: OK: MISSING: ESTIMATED QUANTITY:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 9 Nov-94 CWW

CHECKED BY:

AJN

BLDG:

7612

FILE:

7612.XLS

	BOILE	R & CON	IVERTER - HVAC I	JPGRAD	E OBSER	VATIONS	
BOILER/CONVERTER NO	).	BLR-2	LOCATION (RM)	MER	······		
BOILER TYPE:		STM	MFG.: OSAGE		MODEL:	60-15	
CONVERTER TYPE:			MFG.:		MODEL:		
STM - Steam			ot Water Conv.			np HW to Steam Conv	ertor
HW - Hot Water			p. HW to HW Cv.		omestic Hot V	Vater Convertor	
BOILER BURNER	ATMOSP	HERIC:	POWER: X	OK:	Χ	REPLACE:	
COMMENTS:							
****							
						J. H	
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:	سجسيدين الرد						
1							
BLR INSULATION	N/A:	OK: X	MISSING:		ΓED QUANTI		
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMA	TED QUANTI	ГҮ:	
COMMENTS:							
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:			ERTERS TYPICAL OF 76	16 & 7618, H	OWEVER TH	ESE HAVE	
	NEW INS	ULATION/ AS	BESTOS ABATED				
CV PUMP MOTOR	N/A:	JOK:	REPLACE:	SIZE:			
CV PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:	11, 4,, 0,	1010	1,5,5,0	10,	<del></del>		
O OWNER O.							
CV INSULATION	N/A:	OK:	MISSING:	ESTIMA	ΓED QUANTI	ΓY:	
CV PIPE INSUL.	N/A:	OK:	MISSING:	ESTIMA	ED QUANTI	ΓY:	
COMMENTS:							
						<del>-</del>	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/10/94 PREPARED BY: AJN/CWW

**BUILDING DATA SURVEY OBSERVATIONS** 

BLDG NUMBER: 7614 **BLDG NAME: ENL BARRACKS W/AS** 

CONDITIONED SQFT: ELECTRIC METER: N

LOCATION: FT. RILEY, KS

41,892

GAS METER: Y SUSPECT ACM: Y

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO:

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	0	0	0	0	0	0
REQ STOP:	24	24	24	24	24	24	24

#### **REMARKS:**

Bldg. Contact @ Ext. 5367 Suspect ACM located on boiler flue and DHW storage tanks

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER		AHU LOCATION	N: MER. NORTH	-
REFRIG SYS # SRVNG A	HII: ch-1	SERVES AREA:	ΗΔΙΙΜΑΥς	
REFRIG 313 # SRVING AI		F BLDG AREA HEATED:	nallyva13	5
AHU UNIT TYPE SINGL	LE ZONE	NU	JMBER OF ZONES IF MZ UNI	т:о
CFM-HTG:	3,500	CFM-CLG:	3,500	
MIN %OA:	100	MAX %OA:	100	
NAMEPLATE				
UNIT MFG:	AIRTHERM	UN	IT MODEL: L0815	
SUPPLY FAN HP:	1	RET/EX	H FAN HP:	0
SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN	MTR MFG:	<del></del> -
SUPPLY FAN MTR MODEL:	8-331260-03	RET/EXH FAN MT	R MODEL:	
COMMENTS:				
COILS				
Coil	Coil Type	Modulating	Valve?	
PREHEAT COIL:	NONE			
HEATING COIL:	DUAL TEMP WATER			
REHEAT COIL:	NONE			
HUMIDIFIER:	NONE			
COOLING COIL:	cw			
SCHEDULE				
DAY SCHEDULE NO:	10		MONTH SCHEDULE NO:	3
SCHEDULE COMMENTS:				:
SUN:	MON: TUE: WED	D: THUR: FRI:	SAT:	:
PRES START: 0	0 0	0 0 0	0	ř
PRES STOP: 24	24 24 2	24 24 24	24	:
REQ START: 0	0 0	0 0 0	0	
REQ STOP: 24	24 24 2	24 24 24	24	
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT: NOV: DE	EC:
ON:				a i
CONTROLS				<del></del> -
TYPE OF CONT	TROLS: PNEUMATIC		OTHER	
PRESENT TEMP WINTI	R OCC:	0.	DECK DEG F:	0
PRESENT TEMP WINTR U		COLD	DECK DEG F:	0
DDECENT TEMP OU	W 000.		ED AIR DEG F:	
PRESENT TEMP SUM PRESENT TEMP SUM U		0 OTHER SETPO	POINT DESCRIP: POINT DEG F:	0
MIN OA DMPR CONTROL	L: N MIXED AIR	DMPR CONTROL: N	IMPLEMENT DEMAND LIM	T CNTRLS?
MAX OA DMPR CONTROL		ER DB CONTROL: N		ME CLOCK:
RET AIR DMPR CONTROL		ER WB CONTROL: N	TIME CLOCK OPE	<del></del>
EXH AIR DMPR CONTROL				
OTHER CONTROLS D	JESCB.			
CONTROLS COM				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER		AHU LOCATION: MER S	оитн
REFRIG SYS # SRVNG AI	HU: CH-1	SERVES AREA: HALLWA	YS
	% OF BL	DG AREA HEATED:	5
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF	ZONES IF MZ UNIT: 0
CFM-HTG:	3,500	CFM-CLG:	3,500
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:	AIRTHERM	UNIT MODEL	: L0815
SUPPLY FAN HP:	1	RET/EXH FAN HP	: 0
SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN MTR MFG	:
SUPPLY FAN MTR MODEL:	8-331260-03	RET/EXH FAN MTR MODEL:	:
COMMENTS:		And the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	DUAL TEMP WATER		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	10	MONTH	SCHEDULE NO: 3
SCHEDULE COMMENTS:			
	11011 7115 14/50	TIUID EDI CAT	
SUN:		THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	0 0 0 = 0 =	0 0 0	
REQ STOP: 24	24 24 24	24 24 24	
	MAR: APR: MAY: JU	N: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT TY	YPE: OTHER
PRESENT TEMP WINTE	R OCC: 0	HOT DECK DE	G F: 0
PRESENT TEMP WINTR U	· · · · · · · · · · · · · · · · · · ·	COLD DECK DE	G F: 0
		MIXED AIR DE	<del></del>
PRESENT TEMP SUM U		OTHER SETPOINT DESC OTHER SETPOINT DE	<del></del>
MIN OA DMPR CONTROL	.: N MIXED AIR DM	PR CONTROL: N IMPLEM	IENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL		<u></u>	TIME CLOCK: N
		<u> </u>	TIME CLOCK OPERATIONAL?
RET AIR DMPR CONTROL EXH AIR DMPR CONTROL	<b></b>	WE CONTROL: [N]	TIME CLOCK OPERATIONAL? IN
OTHER CONTROLS D			· · · · · · · · · · · · · · · · · · ·
CONTROLS COMM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**DATE:** 10/10/94 PREPARED BY: AJN/CWW

EMC NO: 1406-001

	7 <b>614</b> AF	IU LOCATION: THROUGHOU	R BLDG
REFRIG SYS # SRVNG AHU:	CH-1 SEF	RVES AREA: HALLWAYS	
KEI KIG 516 # SKVNG AIIG.	% OF BLDG ARE		70
AHU UNIT TYPE FAN COILS	S - 2 PIPE	NUMBER OF ZONE	S IF MZ UNIT: 0
CFM-HTG:	41,400	CFM-CLG: 41	,400
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	7.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	AND THE RESIDENCE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY	ET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		EXH FAN MTR MODEL:	
COMMENTS: TO	TAL FOR 92 FAN COILS		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: NO	DNE		
HEATING COIL: DU	IAL TEMP WATER		
REHEAT COIL: NO	NE		
	DNE		
COOLING COIL: CW	V	Ш	
SCHEDULE			
THE RESERVE AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECOND PROPERTY AND A SECO	10	MONTH SCHE	DULE NO: 3
SCHEDULE COMMENTS:			:
SUN: MO	N: TUE: WED: THUR:	FRI: SAT:	
PRES START:0	0 0 0	0 0	
	24 24 24 24	24 24	
REQ START: 0	$\frac{0}{0} = \frac{0}{0} = \frac{0}{0}$	0 0	
REQ STOP: 24	24 24 24 24	24 24	
MONTHS JAN: FEB: MAR	R: APR: MAY: JUN: JU	IL: AUG: SEP: OCT:	NOV: DEC:
CONTROLS			
TYPE OF CONTROL	S: ELECTRIC	THERMOSTAT TYPE:	
PRESENT TEMP WINTR OC	C: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR UNOC	CC: 0	COLD DECK DEG F: MIXED AIR DEG F:	<u>0</u> ,
PRESENT TEMP SUM OC	C: 0 0	THER SETPOINT DESCRIP:	<u> </u>
PRESENT TEMP SUM UNOC		OTHER SETPOINT DEG F:	0.
MIN OA DMPR CONTROL:	MIXED AIR DMPR CON	TROL: N IMPLEMENT DE	MAND LIMIT CNTRLS? N
	ECONOMIZER DB CON	TROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL:	N ECONOMIZER WB CON	TROL: N TIME C	LOCK OPERATIONAL? N
EXH AIR DMPR CONTROL:	N		
OTHER CONTROLS DESC	R:		
CONTROLS COMMENT	rs:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: AJN/CWW

BUILDING NUMB	ER: 7614				BOILER	RM LOC	ATION:	MER		
BOILER UNIT	Γ									
- D 18 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		BLR/CON	VERTER SER	VES ARE	A OR SE	ERVICE:	ALL			
SOURCE OF BLI	OG HEAT									
● 図 BOILER					NVERT	_				_
BOILER T		TO 250 DEC)			VERTER 'ERTER '	=				
BOILER TY FUEL TY		TO 250 DEG)			HT SOL					
CENTRAL PL	ANT DIRECT	•								
IAMEPLATE	•		% /	AREA HE	ATED B	Y BB RAI	DIATION:			20
BOILER MFG: KEV	VANEE			BLR CA	AP OUTF	UT (BTU	H):		2,350,000	
UNIT MODEL: M-2	35-KX		<del>==</del>			UT (BTU			2,938,000	
COMMENTS:										
CUEDULE										
CHEDULE							·			
DAYS SCHEDULE						MONTH	SECHD	ULE NO	•	1
SCHEDULE COMMEN										
DDEC CTART.	SUN: MO		WED: TH	HUR:	FRI:	SAT:				
PRES START: =	0 24	$\frac{0}{24}$ $\frac{0}{24}$	24	24	24	24				
REQ START:	0	0 0	0	0	<u> </u>	0				
REQ STOP:	24	24 24	24	24	24	24				
MONTHS JAN: ON:	FEB: MAR		MAY: JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	:
<u></u>							$\boxtimes$			_
CONTROLS										
TYPE OF BL	R CONTROL	S: PNEUMA	ATIC			RESE	T CONTR	ROLS: [	Y	
OPERATI	NG SETPOIN	IT:	0 DEG F	or PSIG						
TYPE OF BURNE	R CONTROL	S:								
CONTROL	S COMMENT	S:								;

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: AJN/CWW

BUILDING NUMBER	: 7614			BOILER	RM LOCA	ATION:	MER		
<b>BOILER UNIT</b>									
SOURCE OF BLDG	HEAT	BLR/CONVERT	ER SERVES AF	REA OR SE	RVICE:	DHW			
● ⊠ BOILER BOILER TAG BOILER TYPE	: MED PRESS	STEAM (15# TO 12	25#) CON	ONVERTI NVERTER	TAG:				
FUEL TYPE			COP	IV HT SOL	JRCE: _				
NAMEPLATE			% AREA H	EATED BY	/ BB RAD	DIATION:			0
BOILER MFG: OSAG UNIT MODEL: 60-15 COMMENTS:	Ē			CAP OUTF	-			1,939,200 2,424,000	
DAYS SCHEDULE NO SCHEDULE COMMENTS					MONTH	SECHD	ULE NO:		3
PRES START: PRES STOP: REQ START: REQ STOP:	N: MON: 0 0 24 24 0 0 24 24	TUE: WE 0 24 0 24	D: THUR: 0 0 24 24 0 0 24 24	FRI: 0 24 0 24	SAT: 0 24 0 24				
MONTHS JAN: FE ON: ☑		APR: MAY:	JUN: JUL	: AUG:	SEP:	ост: ⊠	NOV:	DEC:	
CONTROLS									
TYPE OF BLR OPERATING TYPE OF BURNER	SETPOINT:	ELECTRIC 10	DEG F or PSIC	9	RESE	CONTF	ROLS: [	N	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: AJN/CWW

BUILDING NUM	BER: 7614		Į.	BOILER RM LOC	ATION: MER	
<b>BOILER UNI</b>	Т					
	•	DI DICONI/EDT	50 050V50 AD5	4 OD CED///CE	ALL	
SOURCE OF BL	DG HEAT	BLR/CONVERT	ER SERVES ARE	A OR SERVICE:	ALL	
<b>8 5</b> 50 50 50				MIVEDTED		
● ☑ BOILER				<u>NVERTER</u> VERTER TAG: 「		
BOILER	,			ERTER TYPE:		
BOILER T	h			HT SOURCE:		
FUEL T	YPE:		CONV			
CENTRAL F	PLANT DIRECT				1.11	
NAMEPLATI	=		% AREA HE	ATED BY BB RA	DIATION:	
			BLD C	AD OUTDUT /BTI	III),	
BOILER MFG:				AP OUTPUT (BTU CAP INPUT (BTU		TANK TO A STREET OF THE STREET
UNIT MODEL:			DLK	OAF 1141 OF (D10		
COMMENTS:						
SCHEDULE						
OOTILDOLL						
DAYS SCHEDULE				MONT	H SECHDULE NO:	3
SCHEDULE COMME	NTS:					
	SUN: MON:	TUE: WE	D: THUR:	FRI: SAT:		
PRES START:	0 0	0	0 0	0 0		
PRES STOP:	24 24	24	24 24	24 24		:
REQ START:	0 0	0	0 0	0 0		
REQ STOP:	24 24	24	24 24	24 24		
				AUG. OFD.	OOT: NOV	
MONTHS JAN: ON:	FEB: MAR:	APR: MAY:	JUN: JUL:	AUG: SEP:	OCT: NOV:	DEC:
ON.	$\boxtimes$	$\boxtimes$	$\boxtimes$			
CONTROLS						
TYPE OF E	BLR CONTROLS:	ELECTRIC		RESE	T CONTROLS:	1
OPERA'	TING SETPOINT:		DEG F or PSIG			
TYPE OF BURN	IER CONTROLS:					
CONTRO	LS COMMENTS:					
HW PUMP						
PUMP TAG:	DTWP-1	PUMP HP:		PUMP M	FG: CENTURY	
PUMP SERVICE:	DUAL TEMP PUN	<b>I</b> P		PUMP MOD	EL: 5C-184-KMA	
HW PUMP						
	DTMD 2	DIMED UP-		2 DIMP M	EG: CENTURY	
		)				
PUMP TAG: PUMP SERVICE:		PUMP HP:			FG: CENTURY DEL: 5C-184-KMA	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: AJN/CWW

HW PUMP					
PUMP TAG:	DTWP-3	PUMP HP:	2	PUMP MFG:	CENTURY
PUMP SERVICE:				PUMP MODEL:	5C-184-KMA
HW PUMP					
PUMP TAG:	DTWP-4	PUMP HP:	3	PUMP MFG:	CENTURY
PUMP SERVICE:	DUAL TEMP PUMP			PUMP MODEL:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: AJN/CWW

## PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUI	MBER:	7614			:	BLDG N	NAME:	ENL BAF	RACKS	W/AS		-	
PER RAD	(SYSTE	M TAG) N	O: RAD	-1			RAD S	YS LOCA	TION:	VESTIBU	LES, TOI	LETS	
SOL	URCE OF	HEATIN	G: BLR	-1			S	SERVES A	AREA:				
RAD	I NOITAI	UNIT TYP	E: HW					% AREA	HTG:		2	Ō	
RADIA	TION	PUM	Р										
PUMP	TAG: 1			PUN	IP HP:	0.	75	PUMP	MFG:	RELIANC	E		
								PUMP M	ODEL:	442775-G	T		
SCHED	ULE												
DA	YS SCH	EDULE N	0:	1(	<u>.</u>	MOI	NTHS SC	CHEDULE	NO:		1		
SCHE	DULE C	OMMENT	s:										
		SUN:	MON:	TUE	: WE	D: TH	IUR:	FRI:	SAT:				
PRES S	TART:	0	0		)	0	0	0	0				
PRES	STOP:	24	24	24	4	24	24	24	24				
REQ S	TART:	0	0		2	0			0				
REQ	STOP:	24	24	2	4	24	24	24	24				:
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$		$\boxtimes$	$\boxtimes$						$\boxtimes$		$\boxtimes$	
CONTR	ROLS												
TY	PE OF R	AD. CON	TROLS:										
	RADIA	TION CO	NTROL:	NONE									
	ОС	C HT SPA	CE SP:	-	0								
	UNOC	C HT SPA	CE SP:		0			R	ESET C	ONTROL:	N		
	CONTR	OL COM	MENTS:	3 WAY	PNEUM	ATIC C	ONTROL	VALVE	N MER				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: AJN/CWW

#### REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

REF. UNIT NUMBER/TAGE   CH-1	BLDG NUMBER: 7614		BLDG NAME:				
NAMEPLATE	REF. UNIT NUMBER/TAG:	CH-1		•	-		C'S
CHILLER MFG: TSI TOWER MFG: BOHN  CHILLER MODEL: SC2CD70  # OF TOWER FANS: 4  CHILLER SERIAL NO: 9836-1  TOWER FAN V: 208  CHILLER AMPS: 300  TOWER FAN HP: 1.5  CHILLER AMPS: 300  TOWER FAN HP: 1.5  CHILLER PH: 0  CHILLER PH: 0  CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10  MONTHS SCHEDULE NO: 2  SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT:  PRES START: 0 0 0 0 0 0 0 0 0  REQ START: 0 0 0 0 0 0 0 0 0  REQ START: 0 0 0 0 0 0 0 0 0  REQ START: 0 0 0 0 0 0 0 0 0 0  REQ START: 0 0 0 0 0 0 0 0 0 0  REQ STOP: 24 24 24 24 24 24 24 24  MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: ON: ON: ON: ON: ON: ON: ON: ON: ON	UNIT	TYPE RECIPRO	CATING WITH AIR			<u> </u>	
CHILLER MODEL:   SC2CD70	NAMEPLATE					_	
CHILLER MODEL: SC2CD70 # OF TOWER FANS: 4 CHILLER SERIAL NO: 9836-1 TOWER FAN V: 208 CHILLER SERIAL NO: 9836-1 TOWER FAN MPS: 7.2 CHILLER AMPS: 300 TOWER FAN HP: 1.5 CHILLER AMPS: 70 CHILLER PH: 0 CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 REG STOP: 24 24 24 24 24 24 24 REQ START: 0 0 0 0 0 0 0 0 REG STOP: 24 24 24 24 24 24 24 24 REQ START: 0 0 0 0 0 0 0 0 0 REG STOP: 24 24 24 24 24 24 24 24  MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	CHILLED MEG.	Tel		TOWER MEG	ROHN		
CHILLER SERIAL NO: 9836-1					ВОПИ		4
CHILLER V: 208 TOWER FAN AMPS: 7.2  CHILLER AMPS: 300 TOWER FAN HP: 1.5  CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 MONTHS SCHEDULE NO: 2  SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0  PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24							
CHILLER AMPS:			208				MAX . NO
CHILLER PH: 0 CHILLER CAP (TONS): 70  COMMENTS:    COMMENTS:		A A A A A A A A A A A A A A A A A A A					
COMMENTS:   SCHEDULE NO:   10	CHILLER PH:						<del></del>
DAYS SCHEDULE NO:			70				
DAYS SCHEDULE NO: 10 MONTHS SCHEDULE NO: 2  SCHEDULE COMMENTS:    SUN: MON: TUE: WED: THUR: FR: SAT:	COMMENTS:		<del> </del>				
SCHEDULE COMMENTS:   SUN: MON: TUE: WED: THUR: FRI: SAT:	SCHEDULE						
SUN: MON: TUE: WED: THUR: FRI: SAT:   PRES START:				MONTHS SCHEDU	JLE NO:	2	
PRES START: 0 0 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	SCHEDULE COMMEN	NTS:					
PRES STOP:         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24	SUN:	MON: TUE	: WED: THU	R: FRI: SAT:			:
REQ START:   0	PRES START: 0	0	0 0	0 0 0			:
REQ STOP:   24   24   24   24   24   24   24   2	PRES STOP: 24	24 2	<u>.4</u> <u>24</u>	24 24 24			:
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: ON: ON: ON: ON: ON: ON: ON: ON: ON	<del></del>						;
CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA	REQ STOP: 24	. 24 2	.4 24	24 24 24			
CONTROLS  TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA	MONTHS JAN: FEB:	MAR: APR:	MAY: JUN:	JUL: AUG: SEF	): OC	T: NOV:	DEC:
TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA	ON:						
TYPE OF CONTROLS: ELECTRIC  CWS SETPOINT: 0 CNWS SETPOINT: 0  CWR SETPOINT: 0 CNWR SETPOINT: 0  PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS:  PRESS LITE LOW: N TEMP LITE LOW: N  PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA						Ц	
CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0  PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA	CONTROLS						
CWR SETPOINT: 0 CNWR SETPOINT: 0  PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA	TYPE OF CONTR	OLS: ELECTRIC	<b>)</b>				
CWR SETPOINT: 0 CNWR SETPOINT: 0  PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA	CWS SETP	POINT	0	CNWS SETPOIN	r		<u> </u>
PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA		<del></del>					
PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA	PRESS L	TE HI: N	TEMP LITE HI	OTHER IN	IDICATIO	nrs.	<del></del>
PRESS GAUGES: N TEMP GAUGES: N  CONTROLS COMMENTS:  CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA		<del></del>			DIOXIII		
CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA				=			<del></del> ;
CW and CNW PUMPS  PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA							······································
PUMP TAG: 1 PUMP HP: 1.5 PUMP MFG: AURORA							
			HP: 1	5 PLIMP MEC	: ALIR	ORA	
				<del></del>			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7614

FILE:

			G UNIT - HVAC L		<b>DR2FKAY</b>	IION2		
YHU NO::	AHU-1	LOCATIO	1 /	OOR MER				
AHU TYPE:	SZ	MFG.:	CENTRAL AIRE		MODEL:	L0815		
SZ - Single Zone		iting & Vntltng		n Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe	)	
/IZ - Mulitzone		able Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit I			duction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Dampe	er Actuator
							RP-ACT = Replace	Actuator
ILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE	•	COMMEN	ITS:	N/A		
COMMENTS:								
SOMMETTO.								
					- A.W.			
COOLING COIL	IN/A	Tok: X	TREPLACE:	ISIZE:	CNTLVLV	(NONE)	RP-ACT:	RP-BD:
	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	(NONE) OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	
HEATING COIL PREHEAT COIL	N/A: X N/A: X		REPLACE:	1		II		RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION DUCT INSULATION	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
PREHEAT COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7614

FILE:

	AIR	HANDLIN	IG UNIT - HVAC	UPGRADE	OBSERVA'	TIONS		
AHU NO.:	AHU-2	LOCATIO	· /	LOOR MER SOU				
AHU TYPE:	SZ	MFG.:	CENTRAL AIRE		MODEL:	L0815		
SZ - Single Zone		ating & Vntltn		an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	:)	
MZ - Mulitzone	·VAV - Var	iable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	UH - Unit	Heater	.IND -	Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	- <del></del>						DPR-ACT = Damp	er Actuator
							RP-ACT = Replac	e Actuator
				-				
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN			<del></del>	
INLET VANES	N/A: X	OK:	COMMENTS:	1	<del></del>		······································	<del></del>
RETURN AIR FAN	OK:	IREDI ACE	FAN BEARINGS:		ITC.			
KETUKN AIK FAN	11011		LI AN DLANINGS.	ICOMMEN	{  S:	N/A		
	OK:			COMMEN		N/A		
RETURN FAN MOTOR		REPLACE		COMMEN		N/A		
RETURN FAN MOTOR						N/A		
RETURN FAN MOTOR						N/A		
RETURN FAN MOTOR COMMENTS:							RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL	ОК:	REPLACE		COMMEN	ITS:	(NONE)	RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK:	REPLACE OK: X	REPLACE:	COMMEN	CNTLVLV	(NONE)		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	(NONE)	RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7614

FILE:

	REFRIGE	RATION		AC UPGRADE OBSERVATIONS	
CHILLER / EQUIP. NO.		CH-1	LOCATION (RM)	MER / ACCU OUTSIDE	
REFG. EQUIP. TYPE:		R-ACCU	MFG.: TSI/BOH		
C-WCT = Centrifugal w/				Reciprocating w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating		e Cooling Tow		= Absorption w/ Water Side Cooling Tower	
ACCU = Air Cooled Cond			CT = Cool		
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE: TYPICAL OF 4, 2 UNITS	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:	140				
COOLING TOWER	N/A:	IOK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	IOK: X	REPLACE:	SIZE:	
COMMENTS:		10.0.7	I		
COMMENTS.					
CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:	DAMAGE	O INSULATIO	N ON CHW PUMP		
	Thurs	IOV. V	IDEDLACE:	ICI7E:	
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS	N/A: N/A: N/A:	OK: X OK: X OK: X	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7614

FILE:

PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  HWPUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED HWPUMP SEALS N/A: OK: X REPLACE: SIZE: PIPING TO PUMP RUSTY HWPUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HWPUMP SEALS N/A: OK: REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HWPUMP SEALS N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HWPUMP SEALS N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HWPUMP MOTOR N/A: OK: X REPLACE: SIZE: HWPUMP MOTOR N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	BOILE	R & CON	VERTER - HVAC UI	PGRADE	OBSERV	/ATIONS
CONVERTER TYPE: MFG: MODEL:  STMSteam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor  HHW/-W-High Temp HW to HW CV. DHW - Domestic Hot Water Convertor  SOLLER BURNER ATMOSPHERIC: POWER: X   OK: X   REPLACE:  COMMENTS: BOILER RUSTED AROUND BASE  BER PUMP MOTOR N/A: X   OK: REPLACE: SIZE:  SIZE: SIZE: SIZE: SIZE:  SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SI		BLR-1	LOCATION (RM)	MER		
STM - Steam STM-HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HW - Hot Water MT - High Temp HW to Steam Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - Domestic Hot Water Convertor DHW - SEALS N/A: OK: REPLACE: SIZE: 2 HP, PUMP UNINSULATED N/A: DK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED N/A: DK: X REPLACE: SIZE: DHW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD COMMENTS: DW PUMP SEALS N/A: OK: REPLACE: SIZE: NOT BOLTED TO PAD COMMENTS: DW PUMP SEALS N/A: OK: REPLACE: SIZE: SIZE: SIZE: DW PUMP SEALS N/A: OK: REPLACE: SIZE: SIZE: SIZE: DW PUMP SEALS N/A: OK: REPLACE:	HW	MFG.: KEWANEE		MODEL:	M-235-KX	
HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Conventor  BOILER BURNER JATMOSPHERIC: POWER: X OK: X REPLACE:  COMMENTS: BOILER RUSTED AROUND BASE  BURNER WITH SEALS INA: X OK: REPLACE: SIZE:  SIZE: SIZE:  COMMENTS:  BURNENTS:  SIZE: SIZE: SIZE:  COMMENTS:  BURNENTS: SIZE: SIZE: SIZE:  COMMENTS: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			MFG.:		MODEL:	
BOILER BURNER JATMOSPHERIC: POWER: X OK: X REPLACE:  COMMENTS: BOILER RUSTED AROUND BASE  BUR PUMP MOTOR NA: X OK: REPLACE: SIZE:  BUR PUMP SEALS NIA: X OK: REPLACE: SIZE:  COMMENTS:  BUR INSULATION NA: OK: X MISSING: ESTIMATED QUANTITY:  PIPE INSULATION NA: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR NA: OK: X REPLACE: SIZE: PIPING TO PUMP RUSTY  HW PUMP MOTOR NA: OK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED  HW PUMP MOTOR NA: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED  HW PUMP MOTOR NA: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED  HW PUMP MOTOR NA: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED  HW PUMP SEALS NIA: OK: X REPLACE: SIZE: 3 HP, LEAKING, RUSED, UNINSULATED  HW PUMP SEALS NIA: OK: X REPLACE: SIZE: NOT BOLITED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE:  COMMENTS: SIZE: SIZE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SIZE: ONE BOLITED TO PAD  COV PUMP SEALS NIA: OK: REPLACE: SIZE: SI	STM/HW	- Steam to Ho	t Water Conv.	·HTHW/ST	M - High Tem	p HW to Steam Convertor
BUR PUMP MOTOR	HTHW/HV	V - High Temp	o. HW to HW Cv.	DHW - Do	mestic Hot Wa	ater Convertor
BLR PUMP MOTOR BLR PUMP SEALS N/A: X OK: REPLACE: SIZE:  COMMENTS:  BLR INSULATION N/A: OK: X IMISSING: ESTIMATED QUANTITY:  PIPE INSULATION N/A: OK: X IMISSING: ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 9 HPING TO PUMP RUSTY HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:	ATMOSP	HERIC:	POWER: X	OK:	Χ	REPLACE:
BLR PUMP SEALS   N/A: X   OK: REPLACE:   SIZE:    COMMENTS:   BLR INSULATION   N/A: OK: X   MISSING:   ESTIMATED QUANTITY:    PIPE INSULATION   N/A: OK: X   MISSING:   ESTIMATED QUANTITY:    COMMENTS:   SIZE: 2 HP, PUMP UNINSULATED    HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: 2 HP, PUMP UNINSULATED    HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: 2 HP PUMP UNINSULATED    HW PUMP SEALS   N/A: OK: X   REPLACE:   SIZE: 2 HP PUMP UNINSULATED    HW PUMP SEALS   N/A: OK: X   REPLACE:   SIZE: 2 HP, PUMP UNINSULATED    HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: 2 HP, LEAKING, RUSED, UNINSULATED    HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: 3/4 HP, RUSTED, UNINSULATED    HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE:   NOT BOLTED TO PAD    COMMENTS:   3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO    CV PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    CV PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:    CV PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:    CV PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    CV PUMP SEALS   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:	BOILER F	RUSTED ARO	UND BASE			
BLR PUMP SEALS   N/A: X   OK: REPLACE:   SIZE:    COMMENTS:						
DELT INSULATION IN/A: OK: X MISSING: ESTIMATED QUANTITY:  PIPE INSULATION IN/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  HIW PUMP MOTOR IN/A: OK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED  HW PUMP SEALS IN/A: OK: X REPLACE: SIZE: PIPING TO PUMP RUSTY  HW PUMP MOTOR IN/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED  HW PUMP SEALS IN/A: OK: REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED  HW PUMP MOTOR IN/A: OK: X REPLACE: X SIZE:  HW PUMP MOTOR IN/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED  HW PUMP SEALS IN/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED  HW PUMP MOTOR IN/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED  HW PUMP SEALS IN/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE:  CV PUMP MOTOR IN/A: X OK: MISSING: ESTIMATED QUANTITY:	N/A: X	OK:	REPLACE:	SIZE:		
BLR INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:	N/A: X	OK:	REPLACE:	SIZE:		
PIPE INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   2 HP, PUMP UNINSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PIPING TO PUMP RUSTY   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   2 HP PUMP UNINSULATED   HW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   2 HP PUMP UNINSULATED, RUSTED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   2 HP, LEAKING, RUSED, UNINSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   SIZE:   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   SIZE:   NOT BOLTED TO PAD    COMMENTS:   3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   CV PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   CV PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   CV PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   CV PUMP MOTOR   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:						
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  HWPUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED HWPUMP SEALS N/A: OK: X REPLACE: SIZE: PIPING TO PUMP RUSTY HWPUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HWPUMP SEALS N/A: OK: REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HWPUMP SEALS N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HWPUMP SEALS N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HWPUMP MOTOR N/A: OK: X REPLACE: SIZE: HWPUMP MOTOR N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	·					
HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PIPING TO PUMP RUSTY HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HW PUMP SEALS N/A: OK: REPLACE: X SIZE: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS:  CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	N/A:	OK: X	MISSING:	ESTIMATE	ED QUANTITY	<b>/</b> :
HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PIPING TO PUMP RUSTY HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HW PUMP SEALS N/A: OK: REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: SIZE: CV P	N/A:	OK: X	MISSING:	ESTIMATE	ED QUANTITY	<i>(</i> :
HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, PUMP UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PIPING TO PUMP RUSTY HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HW PUMP SEALS N/A: OK: REPLACE: SIZE: 2 HP PUMP UNINSULATED, RUSTED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: CV PUMP SEALS N/A: OK: SIZE: SIZE: SIZE: CV P						
HW PUMP SEALS N/A: OK: REPLACE: X SIZE:  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED  HW PUMP SEALS N/A: OK: X REPLACE: SIZE:  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED  HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE:  CV PUMP SEALS N/A: X OK: REPLACE: SIZE:  COMMENTS:  CV PUMP SEALS N/A: X OK: REPLACE: SIZE:  CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 2 HP, LEAKING, RUSED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:  CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	11				2 HP PUM	P UNINSULATED, RUSTED
HW PUMP SEALS N/A: OK: X REPLACE: SIZE:  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP, RUSTED, UNINSULATED  HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:  COMMENTS:  CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:  CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:		OK:				
HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS:  3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR V/A: X OK: REPLACE: SIZE: NOT BOLTED TO PAD  CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:  CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	11		1		2 HP, LEAI	KING, RUSED, UNINSULATED
HW PUMP SEALS  N/A: OK: X REPLACE: SIZE: NOT BOLTED TO PAD  COMMENTS: 3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CV PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  CV INSULATION  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CV PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:	JL			SIZE:		
COMMENTS:  3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  CV PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  CV PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  CV INSULATION  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CV PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:	11				3/4 HP, RL	ISTED, UNINSULATED
CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:  CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	<del></del>			SIZE:	NOT BOLT	ED TO PAD
CV PUMP SEALS N/A: X OK: REPLACE: SIZE:  COMMENTS:  CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:  CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	3-WAY VA	ALVE ABOVE	#4 & #5 RUSTED ALSO			
CV PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  CV INSULATION  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CV PIPE INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:	761/4	Tov	Inch to the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second seco	Tours		
CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:  CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:			1	1		10-10-10-10-10-10-10-10-10-10-10-10-10-1
CV INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:  CV PIPE INSUL.   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:	IIIN/A: X	Jok:	KEPLACE:	SIZE:		
CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	·······		***************************************	·		7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.
CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	ΙΝ/Δ. Υ	Į∪K·	IMISSING:	TECTIMATE	ED OLIVNITITY	1.
	f L					
	Juva. A	IOV.	INIOSING:	ESTIMATE	LU QUANTITY	•
COMMENTS:		STM/HW HTHW/HV BOILER F BOILER F N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: X N/A: X N/A: X	STM/HW - Steam to Ho HTHW/HW - High Temp ATMOSPHERIC: BOILER RUSTED ARO  N/A: X OK: N/A: X OK: N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X  N/A: OK: X	BLR-1 LOCATION (RM) HW MFG.: KEWANEE MFG.: STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv.  ATMOSPHERIC: POWER: X  BOILER RUSTED AROUND BASE  N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: OK: X MISSING:  N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE:	BLR-1 LOCATION (RM) MER  HW MFG.: KEWANEE  MFG.:  STM/HW - Steam to Hot Water Conv. HTHW/ST  HTHW/HW - High Temp. HW to HW Cv. DHW - Do  ATMOSPHERIC: POWER: X OK:  BOILER RUSTED AROUND BASE  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: OK: X MISSING: ESTIMATI  N/A: OK: X MISSING: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: X REPLACE: SIZE:  N/A: OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:  N/A: X OK: REPLACE: SIZE:	HW MFG: KEWANEE MODEL:  MFG: MODEL:  STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv.  DHW - Domestic Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv.  DHW - Domestic Hot Water Conv.  BOILER RUSTED AROUND BASE  N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE:  N/A: OK: X MISSING: ESTIMATED QUANTITY  N/A: OK: X MISSING: ESTIMATED QUANTITY  N/A: OK: X REPLACE: SIZE: PIPING TO  N/A: OK: X REPLACE: SIZE: 2 HP, PUM  N/A: OK: X REPLACE: SIZE: 2 HP PUM  N/A: OK: X REPLACE: SIZE: 2 HP PUM  N/A: OK: X REPLACE: SIZE: 2 HP, LEAI  N/A: OK: X REPLACE: SIZE: 3/4 HP, RL  N/A: OK: X REPLACE: SIZE: NOT BOLT  3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  N/A: X OK: REPLACE: SIZE: SIZE: NOT BOLT  3-WAY VALVE ABOVE #4 & #5 RUSTED ALSO  N/A: X OK: REPLACE: SIZE:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 9 Nov-94

CHECKED BY:

CWW AJN

BLDG:

7614

FILE:

CONVERTER TYPE:  STM - Steam ST HW - Hot Water HT BOILER BURNER AT COMMENTS: RU  BLR PUMP MOTOR N// BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//	S M/HW - Stea FHW/HW - H MOSPHERI JSTED ARO A: X   C	am to Hot Wigh Temp. H	MFG.: Vater Conv. HW to HW Cv. POWER:	OSAGE			60-15 p HW to Steamater Convertor	) Convertor
HW - Hot Water HT BOILER BURNER AT COMMENTS: RU  BLR PUMP MOTOR N// BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//	M/HW - Stea FHW/HW - H MOSPHERI JSTED ARO	am to Hot W ligh Temp. H IC: UND BASE	MFG.: Vater Conv. HW to HW Cv. POWER:		DHW - Dor	MODEL: M - High Temposeric Hot Wa	p HW to Steam ater Convertor	n Convertor
STM - Steam ST HW - Hot Water HT BOILER BURNER AT COMMENTS: RU  BLR PUMP MOTOR N// BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//	THW/HW - H MOSPHERI JSTED ARO	am to Hot W igh Temp. F IC: UND BASE	Vater Conv. HW to HW Cv. POWER:		DHW - Dor	M - High Tem mestic Hot Wa	ater Convertor	1 Convertor
HW - Hot Water HT BOILER BURNER AT COMMENTS: RU  BLR PUMP MOTOR N// BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//	THW/HW - H MOSPHERI JSTED ARO	igh Temp. F IC: UND BASE	HW to HW Cv. POWER:		DHW - Dor	mestic Hot Wa	ater Convertor	Convertor
BOILER BURNER AT COMMENTS: RU  BLR PUMP MOTOR N// BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//	MOSPHERI JSTED ARO	IC: UND BASE	POWER:					
BLR PUMP MOTOR BLR PUMP MOTOR BLR PUMP SEALS COMMENTS:  BLR INSULATION PIPE INSULATION COMMENTS:  HW PUMP MOTOR HW PUMP SEALS N//	JSTED ARO	UND BASE		X	JOK:	X	IREPLACE:	
BLR PUMP MOTOR BLR PUMP SEALS COMMENTS:  BLR INSULATION PIPE INSULATION COMMENTS:  HW PUMP MOTOR HW PUMP SEALS N//	A: X  C					·		
BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//		ıK:			-			
BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//		)K;						
BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//		)K:						
BLR PUMP SEALS N// COMMENTS:  BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//			REPLACE:		SIZE:			
BLR INSULATION N// PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//	<u> </u>	OK:	REPLACE:		SIZE:			
BLR INSULATION   N// PIPE INSULATION   N// COMMENTS:  HW PUMP MOTOR   N// HW PUMP SEALS   N//								
PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//								
PIPE INSULATION N// COMMENTS:  HW PUMP MOTOR N// HW PUMP SEALS N//								
COMMENTS:  HW PUMP MOTOR HW PUMP SEALS N//		OK: X	MISSING:			ED QUANTITY		
HW PUMP MOTOR N// HW PUMP SEALS N//	A: C	OK:	MISSING:	Χ	ESTIMATE	ED QUANTIT	Y:	15' @ 3"
HW PUMP MOTOR N// HW PUMP SEALS N//								
HW PUMP SEALS N/A		*-						
HW PUMP SEALS N/A								
		DK:	REPLACE:		SIZE:			
LULY STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE		OK:	REPLACE:		SIZE:			
		DK:	REPLACE:		SIZE:			
		DK:	REPLACE:		SIZE:			
		DK:	REPLACE:		SIZE:			
		DK:	REPLACE:		SIZE:			
		DK:	REPLACE:		SIZE:			
	A: X C	DK:	REPLACE:		SIZE:			
COMMENTS:						············		
	<del> </del>		Inen cos		Touze			
		OK:	REPLACE:		SIZE:			
	'A: X C	DK:	REPLACE:		SIZE:			
COMMENTS:								
		·····					• • • • • • • • • • • • • • • • • • • •	
OV INCHI ATION	(A. V 17	31/4	MISSING:		TECTIMAT	ED QUANTIT	V.	
L		DK:				ED QUANTIT		
	/A: X C	OK:	MISSING:		[EQ HMATI	ED QUANTI	Ι.	
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

7614 BLDG: FILE: 7614.XLS **BOILER & CONVERTER - HVAC UPGRADE OBSERVATIONS** BOILER/CONVERTER NO. LOCATION (RM) MER TYPICAL OF 2 BOILER TYPE: MFG.: MODEL: CONVERTER TYPE: STM/HW MFG.: MODEL: STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: OK: REPLACE: COMMENTS: ASBESTOS ON TANKS BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE: BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X MISSING: **ESTIMATED QUANTITY:** PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: OK: HW PUMP MOTOR N/A: X REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR SIZE: N/A: X OK: REPLACE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CONTROL VALVES OK CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 20' @ 2-1/2" COMMENTS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

## **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7616 BLDG NAME: ENL BARRACKS W/AS

GAS METER: N

SUSPECT ACM: Y

CONDITIONED SQFT: 41

41,892

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

FRI: SAT: SUN: MON: TUE: WED: THUR: 0 0 0 0 PRES START: 0 0 24 24 24 24 PRES STOP: 24 0 0 0 0 0 0 REQ START: 0 24 24 24 24 24 24 REQ STOP:

#### **REMARKS:**

Suspect ACM located on boiler flues and DHW storage tanks.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER		AHU LOCATION: MER 1ST FLOOR EAST	
REFRIG SYS # SRVNG A	HU: ch-1	SERVES AREA: HALLWAYS	
ALI NIG 313 # SAVING AI		DG AREA HEATED:	5
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZONES IF MZ U	INIT: 0
CFM-HTG:	3,500	CFM-CLG: 3,500	<u> </u>
MIN %OA:		MAX %OA: 100	
NAMEPLATE			
UNIT MFG:	AIRTHERM	UNIT MODEL:	
SUPPLY FAN HP:	1	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	8-331260-03	RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
	DUAL TEMP WATER		
REHEAT COIL:			
HUMIDIFIER:	NONE	<u> </u>	
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	10	MONTH SCHEDULE NO	: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	i : :
REQ START: 0	0 0 0	0 0 0	
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB: ON:	MAR: APR: MAY: JUN	N: JUL: AUG: SEP: OCT: NOV:	DEC:
			$\boxtimes$
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT TYPE: OTHER	
PRESENT TEMP WINTE		HOT DECK DEG F:	0
PRESENT TEMP WINTR U	NOCC: 0	MIXED AIR DEG F:	0
PRESENT TEMP SUM PRESENT TEMP SUM U		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0,
MIN OA DMPR CONTROL	.: N MIXED AIR DMF		· · · · · · · · · · · · · · · · · · ·
MAX OA DMPR CONTROL			
RET AIR DMPR CONTROL			TIME CLOCK: [ PERATIONAL? [
EXH AIR DMPR CONTROL		/B CONTROL: N TIME CLOCK OF	-ERATIONAL? [
OTHER CONTROLS D			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER							
AHU NUMBEI			AHILI OCATIO	N: MER 1ST F	LOOR WES	т	
					LOOK WES		
REFRIG SYS # SRVNG A	HU: <u>CH-1</u>	% OF BL	SERVES AREA: DG AREA HEATED:	<u> </u>		5	
AHU UNIT TYPE SINGI	_E ZONE		N	UMBER OF ZOI	NES IF MZ L	JNIT: 0	
CEN HTC:		3,500	CFM-CLG:	,	3,500		
CFM-HTG: MIN %OA:		100	MAX %OA:		100		
NAMEPLATE				<del>(</del>			
UNIT MFG:	AIRTHERM		UN	NIT MODEL:			
SUPPLY FAN HP:		1	RET/EX	KH FAN HP:		0	
SUPPLY FAN MTR MFG:	CENTURY	•	RET/EXH FAN	IMTR MFG:			
SUPPLY FAN MTR MODEL:	8-331260-03	}	RET/EXH FAN M	TR MODEL:			
COMMENTS:							
COILS							
Coil	Coil T	Гуре	Modulating	y Valve?			
PREHEAT COIL:	NONE						
HEATING COIL:	DUAL TEMP	WATER					
REHEAT COIL:	NONE						
HUMIDIFIER:	NONE						
COOLING COIL:	cw		; Ш				
SCHEDULE							
DAY SCHEDULE NO:	10			MONTH SCH	EDULE NO	): 1	-
SCHEDULE COMMENTS:							
SUN:	MON: TU	JE: WED:	THUR: FRI:	SAT:			
PRES START: 0	0	0 0	0 0	0			
FILES START.	0			24		:	
PRES STOP: 24	24	24 24	24 24	24			
		24 0 0	24 24 0 0	0			
PRES STOP: 24	24					; ;	
PRES STOP: 24 REQ START: 0 REQ STOP: 24	24	0 0 24 24	0 0 24 24	0	: NOV:	DEC:	
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	24 0 24 MAR: APR:	0 0 24 24 : MAY: JUI	0 0 24 24 N: JUL: AUG:	0 24 SEP: OCT		:	
PRES STOP:         24           REQ START:         0           REQ STOP:         24    MONTHS JAN: FEB:	24 0 24	0 0 24 24	0 0 24 24	SEP: OCT	: NOV:	DEC:	
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	24 0 24 MAR: APR:	0 0 24 24 : MAY: JUI	0 0 24 24  N: JUL: AUG:  THERI	O 24  SEP: OCT.   MOSTAT TYPE:			
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   CONTROLS	MAR: APR:	0 0 24 24 : MAY: JUI	0 0 24 24 N: JUL: AUG:   THERI HO	O 24  SEP: OCT	OTHER	0	
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   ON:   TYPE OF CONT	MAR: APR:  Mar: APR:  FROLS: PNE	0 0 24 24 : MAY: JUI	0 0 24 24  N: JUL: AUG:  THERI HO' COLI	SEP: OCT  SEP: OCT  MOSTAT TYPE: T DECK DEG F: D DECK DEG F:	OTHER	0 0	
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   ON:   TYPE OF CONT  PRESENT TEMP WINTE U	MAR: APR:    MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR: APR:     MAR	O 0 24 24 : MAY: JUI	0 0 24 24  N: JUL: AUG:  THERI HO' COLI	SEP: OCT  SEP: OCT  MOSTAT TYPE: T DECK DEG F: D DECK DEG F: (ED AIR DEG F:	OTHER	0	
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF CONT PRESENT TEMP WINTE	MAR: APR:  MAR: APR:  FROLS: PNE  R OCC:  NOCC:	O 0 24 24 24 : MAY: JUI	O O 24 24  N: JUL: AUG:  THERI HO' COLI MIX OTHER SETP	SEP: OCT  SEP: OCT  MOSTAT TYPE: T DECK DEG F: D DECK DEG F:	OTHER	0 0	
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U  PRESENT TEMP SUI	MAR: APR:	0 0 24 24 : MAY: JUN	O O 24 24  N: JUL: AUG:  THERI HO' COLI MIX OTHER SETP	SEP: OCT  SEP: OCT  MOSTAT TYPE: T DECK DEG F: D DECK DEG F: CED AIR DEG F: OINT DESCRIP: FPOINT DEG F:	OTHER	0 0 0	LS? [I
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM U	MAR: APR:    N   N	0 0 24 24 : MAY: JUI	O O 24 24  N: JUL: AUG:  THERI HO' COLI MIX  OTHER SETPOTHER SETPO	SEP: OCT  SEP: OCT  MOSTAT TYPE: T DECK DEG F: D DECK DEG F: CED AIR DEG F: OINT DESCRIP: FPOINT DEG F:	OTHER	0 0 0	<b>⊨</b>
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	MAR: APR:  MAR: APR:  ROCC:  NOCC:  N	O O 24 24 24 24 24 24 24 24 24 24 24 24 24	O O 24 24  N: JUL: AUG:  THERI HO' COLI MIX OTHER SETPE OTHER SET PR CONTROL: N DB CONTROL: N	SEP: OCT  SEP: OCT  MOSTAT TYPE: T DECK DEG F: D DECK DEG F: CED AIR DEG F: OINT DESCRIP: FPOINT DEG F: IMPLEMENT	OTHER	O O O O O O O O O TIME CLO	ск: 🗓
PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	MAR: APR:  MAR: APR:  MOCC:  MOCC:  MOCC:  NOCC:  N	O O 24 24 24 24 24 24 24 24 24 24 24 24 24	O O 24 24  N: JUL: AUG:  THERI HO' COLI MIX OTHER SETPE OTHER SET PR CONTROL: N DB CONTROL: N	SEP: OCT  SEP: OCT  MOSTAT TYPE: T DECK DEG F: D DECK DEG F: CED AIR DEG F: OINT DESCRIP: FPOINT DEG F: IMPLEMENT	OTHER  DEMAND L	O O O O O O O O O TIME CLO	ск: 🗓

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER: 7616 AHU NUMBER: FC-	Market 1997 (1997)	
REFRIG SYS # SRVNG AHU: CH	I-1 SERVES AREA: ALL	
	% OF BLDG AREA HEATED: 70	
AHU UNIT TYPE FAN COILS - 2	PIPE NUMBER OF ZONES IF MZ UNIT: 0	
CFM-HTG:	41,400 <b>CFM-CLG</b> : 41,400	
MIN %OA:	0 MAX %OA: 0	
NAMEPLATE		
UNIT MFG:	UNIT MODEL:	
SUPPLY FAN HP:	7.5 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: COMMENTS:	RET/EXH FAN MTR MODEL:	
COILS		
	Coil Type Modulating Valve?	
PREHEAT COIL: NONE		
	TEMP WATER	
REHEAT COIL:		
HUMIDIFIER: NONE		
COOLING COIL:		
SCHEDULE		
DAY SCHEDULE NO: 10	MONTH SCHEDULE NO: 3	
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0	0 0 0 0	
PRES STOP: 24 24	<u>24</u> <u>24</u> <u>24</u> <u>24</u> <u>24</u>	
REQ START: 0 0		
REQ STOP: 24 24	<u>24 24 24 24 24</u>	
MONTHS JAN: FEB: MAR: ON:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
CONTROLS		
TYPE OF CONTROLS:	ELECTRIC THERMOSTAT TYPE:  HOT DECK DEG F: 0	
PRESENT TEMP WINTR OCC:	0 COLD DECK DEG F: 0	
PRESENT TEMP WINTR UNOCC:	0 MIXED AIR DEG F: 0	
PRESENT TEMP SUM OCC:	0 OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DEG F: 0	
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N	
MAX OA DMPR CONTROL: Y	ECONOMIZER DB CONTROL: N TIME CLOCK: N	j
RET AIR DMPR CONTROL: N	THE OLON OPERATIONAL OF	ñ
	ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N	
EXH AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: [N] TIME CLOCK OPERATIONAL? [N	╛
OTHER CONTROLS DESCR:	ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

PREPARED BY: AJN/CWW

**DATE**: 10/10/94

_____

BUILDING NUMBER	R: 7616			E	OILER	RM LOCA	TION:	MER		
BOILER UNIT										
	В	LR/CONVER	TER SERV	ES ARE	A OR SI	ERVICE:	SPACE	HEAT		
SOURCE OF BLDG	HEAT —									
BOILER			:	□ co	NVERT	ER				
BOILER TAG	BLR-1			CON	VERTER	RTAG:				
BOILER TYPE	: HW (UP TO 25	0 DEG)		CONV	ERTER	TYPE:				_
FUEL TYPE	: NAT. GAS			CONV	HT SO	URCE:				
CENTRAL PLAN	NT DIRECT									
AMEPLATE			% A	REA HEA	ATED B	Y BB RAD	IATION:			20
BOILER MFG: KEWA	NEE		•	BLR CA	P OUT	PUT (BTU	H):		2,350,000	
	И-235-KX			BLR (	CAP INF	OT (BTU	H):		2,938,000	
COMMENTS:										
CHEDULE										
DAYS SCHEDULE NO	): 10					MONTH	SECHD	ULE NO:	-	1
CHEDULE COMMENTS										=
SI	JN: MON:	TUE: W	VED: TH	UR:	FRI:	SAT:				- :
PRES START:	0 0	0	0	0	0	0				:
PRES STOP:	24 24	24	24	24	24	24				
REQ START:	0 0	0	0	0	0	0				
REQ STOP:	24 24	24	24	24	24	24				•
ONTHS JAN: FE	B: MAR: A	APR: MAY	: JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-
ON:	<b>X X</b>						$\boxtimes$	$\boxtimes$		=
ONTROLS										
ONTROLS  TYPE OF BLR	CONTROLS:	PNEUMATIC				RESE.	r contr	ols: [	Ÿ	
TYPE OF BLR OPERATING	SETPOINT:	PNEUMATIC	0 DEG F	or PSIG		RESE	T CONTR	ROLS: [	Y	
TYPE OF BLR	SETPOINT:	PNEUMATIC		or PSIG		RESE	CONTF	ROLS: [	Ÿ	
TYPE OF BLR OPERATING	SETPOINT:	PNEUMATIC		or PSIG		RESE	CONTR	ROLS: [	Y	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: AJN/CWW

BUILDING NUMBE	R: 7616			BOILER RM LO	OCATION:	MER		
<b>BOILER UNIT</b>	•							
SOURCE OF BLD	G HEAT	BLR/CONVERT	ER SERVES ARE	EA OR SERVIC	E: DHW			
BOILER			<u>C</u>	ONVERTER				
BOILER TA				IVERTER TAG				
BOILER TY		S STEAM (15# TO 1	<del></del>	/ERTER TYPE:				
FUEL TY	PE: NAT. GAS		CON	V HT SOURCE:				
CENTRAL PLA	ANT DIRECT							· :
NAMEPLATE			% AREA HE	ATED BY BB F	RADIATION			
BOILER MFG: OSA	GE		BLR C	AP OUTPUT (B	TUH):		1,939,200	
UNIT MODEL: 6015			BLR	CAP INPUT (B	TUH):		2,424,000	
COMMENTS:								
SCHEDULE							<u> </u>	
DAYS SCHEDULE N				MOI	NTH SECHE	ULE NO:		3
	SUN: MON:	TUE: WI	ED: THUR:	FRI: SAT:				
PRES START:	0 0	0	0 0	00				
PRES STOP: REQ START:	24 0 0	24	$\frac{24}{0} = \frac{24}{0} =$	24 24 0 0	=			1
REQ STOP:	24 24	24	24 24	24 24	Ξ			
					<del>-</del>			]
MONTHS JAN: F	EB: MAR:	APR: MAY:	JUN: JUL:	AUG: SEI	P: OCT:	NOV:	DEC:	-
□ □ □								_
CONTROLS								
TYPE OF BLI	R CONTROLS:	ELECTRIC		RE	SET CONTI	ROLS:	N	
	IG SETPOINT:	10	DEG F or PSIG					
TYPE OF BURNE	R CONTROLS:							
CONTROLS	COMMENTS:							

LOCATION: FT. RILEY, KS

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: AJN/CWW

BUILDING NUMBER	R: 7616	BOILER F	RM LOCATION: MER	
BOILER UNIT				
	BLR/CONVERTER	SERVES AREA OR SE	RVICE:	
SOURCE OF BLDG				
BOILER		☐ CONVERTE	R	
BOILER TAG	): _[	CONVERTER	TAG:	
BOILER TYPE	i:	CONVERTER		
FUEL TYPE	<b>:</b>	CONV HT SOU	JRCE:	
CENTRAL PLAN	NT DIRECT			
NAMEPLATE		% AREA HEATED BY	BB RADIATION:	
BOILER MFG:		BLR CAP OUTP	UT (BTUH):	
UNIT MODEL:		BLR CAP INP	UT (BTUH):	
COMMENTS:				1
SCHEDULE				
DAYS SCHEDULE NO			MONTH SECHDULE NO:	3
PRES START: PRES STOP: REQ START: REQ STOP:	UN:         MON:         TUE:         WED:           0         0         0         0           24         24         24         24           0         0         0         0           24         24         24         24	0 0 0 24 24 24 0 0	SAT:  0 24 0 24	
MONTHS JAN: FE ON:		JUN: JUL: AUG:	SEP: OCT: NOV: DEC:	
CONTROLS				
TYPE OF BLR OPERATING TYPE OF BURNER	S SETPOINT: D	EG F or PSIG	RESET CONTROLS: N	
CONTROLS	COMMENTS:			
HW PUMP				
PUMP TAG: DTV	VP-1 PUMP HP:	2	PUMP MFG: CENTURY	
PUMP SERVICE: DUA	AL TEMP PUMP	PUI	MP MODEL: SC-148-KMA	
HW PUMP				
PUMP TAG: DTV	VP-2 PUMP HP:	2 F	PUMP MFG: CENTURY	
PUMP SERVICE: DUA	AL TEMP PUMP	PUI	MP MODEL: SC-148-KMA	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: AJN/CWW

HW PUMP					
PUMP TAG:	DTWP-3	PUMP HP:	5	PUMP MFG:	CENTURY
PUMP SERVICE: DUAL TEMP PUM				PUMP MODEL:	SC-215-FMA
HW PUMP					
PUMP TAG:	DTWP-4	PUMP HP:	3	PUMP MFG:	CENTURY
PUMP SERVICE:	DUAL TEMP PUMP			PUMP MODEL:	SC-213-FMA

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: AJN/CWW

# PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	7616				BLDG	NAME:	ENL BAR	RACKS	W/AS			
PER RAD	(SYSTE	M TAG) NO:	RAD	-1			RAD S	YS LOCA	TION:	VESTIBU	LES, TOI	LETS	
sol	JRCE OF	HEATING:	BLR-	-1			\$	SERVES A	AREA:				
RAD	IATION	UNIT TYPE:	HW			:		% AREA	HTG:		2	0	
RADIA [*]	TION	PUMP	)										
PUMP 1	ΓAG: 1			PUN	IP HP:	0	).75	PUMP	MFG:	RELIANC	E		
								PUMP M	ODEL:	442775-E	T		
SCHED	ULE												
DA	YS SCH	EDULE NO:		10	)	MC	NTHS S	CHEDULE	NO:		1		
SCHE	DULE C	OMMENTS:											_
		SUN:	MON:	TUE	WE	D: T	HUR:	FRI:	SAT:				
PRES S		0 =	0		= =====	0	0	0	0				
PRES		24	24	24		24	24	24	24				
REQ S			0					0	0				
REQ	STOP:	24	24	24	<u> </u>	24	24		24				
MONTHS	JAN:	FEB: N	IAR:	APR:	MAY:	JUN:	: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$									$\boxtimes$		$\boxtimes$	
CONTR	ROLS												
TY	PE OF F	RAD. CONTI	ROLS:	<u> </u>									
	RADIA	TION CON	rol:	NONE									
	oc	C HT SPAC	E SP:		0								
	OCC HT SPACE SP: UNOCC HT SPACE SP:			0 RESET CONTROL: N									
	CONTR	ROL COMMI	ENTS:	3 WAY	PNEUM	ATIC C	CONTRO	L VALVE I	IN MER				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: AJN/CWW

# REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7616	BLDG NA	AME: ENL BARRACKS W/	AS
REF. UNIT NUMBER/TAG	: CH-1	LOCATION (N	MER#): MER
			RVED: FC'S AND AHU'S
UNIT	TYPE RECIPROCATING WITH	AIR COOLED CONDENSIN	G UNIT
NAMEPLATE			
CHILLER MFG:	TSI	TOWER MFG:	BOHN
CHILLER MODEL:	SC2C070	# OF TOWER FANS:	4
CHILLER SERIAL NO:	9836-2	TOWER FAN V:	0
CHILLER V:	208	TOWER FAN AMPS:	0
CHILLER AMPS:	135	TOWER FAN HP:	1.5
CHILLER PH:	0		
CHILLER CAP (TONS):	70		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE SCHEDULE COMME		MONTHS SCHEDU	LE NO: 2
PRES START: (		THUR: FRI: SAT:	
PRES STOP: 24		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
·	$\frac{4}{0} = \frac{24}{0} = \frac{24}{0} = \frac{24}{0} = \frac{24}{0}$	$\frac{24}{0} = \frac{24}{0} = \frac{24}{0}$	
REQ STOP: 24		24 24 24	
			<u></u>
MONTHS JAN: FEB:	MAR: APR: MAY: JU	N: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTE	ROLS: ELECTRIC	:	
CWS SETF	POINT: 45	CNWS SETPOINT	: 0
CWR SET		CNWR SETPOINT	
		F	
PRESS LI PRESS LITE			DICATIORS:
PRESS GAI			
CONTROLS CO		GES. [14]	
	<u></u>		1
CW and CNW P	UMPS		
PUMP TAG: 1	PUMP HP:	1.5 PUMP MFG	: AURORA
	IP (Chilled Water)	PUMP MODEL	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7616

FILE:

ALULANO :			G UNIT - HVAC U					
AHU NO.:	AHU-1	LOCATIO	N(RM) MER 18	ST FLOOR (WE				
AHU TYPE:	SZ	MFG.:	FO F	0-1/(1:1-	MODEL:	4D ( 4 D:)		L
SZ - Single Zone		ating & Vntltng	•	•	2P for 2 Pipe or	4P for 4 Pipe)		
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit I			duction System	1555.65	Tay v	Inn 107	
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
& B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
								<u> </u>
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:	<u></u>		
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN				
COMMENTS:		THE BROKE		TOOMINIE			**************************************	
COMMENTS.	6							
								····
00011110 0011	II.VA.	OK: X	REPLACE:	SIZE:	CNTLVLV	(NONE)	RP- ACT:	IRP-BD:
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A: X		REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
	N/A: X	OK:				OK:	RP- ACT:	RP-BD:
	NI/A. V					IIUN.	INT-AUI.	INF-DU.
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV			
REHEAT COIL	N/A: X	JOK:	REPLACE:	SIZE:	CNILVLV		RP-ACT = Replace	
REHEAT COIL	N/A: X	JOK:	REPLACE:	SIZE:	CNILVLV		RP-ACT = Replace	
REHEAT COIL	N/A: X	JOK:	REPLACE:	SIZE:	CNIEVEV			
REHEAT COIL COMMENTS:					CNILVLV			
REHEAT COIL COMMENTS:  AHU PUMP MOTOR	N/A:	Ок: х	REPLACE:	SIZE:	CNILVLV			
PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS					CNILVLV			
REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A:	Ок: х	REPLACE:	SIZE:	CNILVLV			
REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A:	Ок: х	REPLACE:	SIZE:	CNILVEV			
REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A:	Ок: х	REPLACE:	SIZE: SIZE:				
REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A:	Ок: х	REPLACE:	SIZE: SIZE:	ED QUANTITY:			
REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:				
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION DUCT INSULATION	N/A: N/A:	OK: X OK: X	REPLACE: REPLACE: MISSING:	SIZE: SIZE:	ED QUANTITY:			
REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION	N/A: N/A:	OK: X OK: X	REPLACE: REPLACE: MISSING:	SIZE: SIZE:	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY: 7616

	AIVOAO		BLDG:	7616		FILE:	7616.XLS	710
	AIR	HANDLIN	G UNIT - HVA		OBSERVA'			
AHU NO.:	AHU-2	LOCATIO		R (EAST)	ODOLINIA.			
AHU TYPE:	SZ	MFG.:	CENTRALAIRE	,	MODEL:	L0815	<u> </u>	
SZ - Single Zone	H&V - He	ating & Vntltng	j. FC -	Fan Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe	)	
MZ - Mulitzone		iable Air Vol.		- Reheat System	·	'	,	
DD - Dual Duct	UH - Unit			- Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	DAMPER	IS SHUT OFF	, F & B IN OPEN PO	SITION TO COIL			DPR-ACT = Damp	er Actuator
	***************************************						RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:		<u></u>		
COMMENTS:								
		***************************************						
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	TS:		<del>'                                    </del>	
INLET VANES	N/A: X	OK:	COMMENTS:	I			· · · · · · · · · · · · · · · · · · ·	
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	TS:	N/A		· · · · · · · · · · · · · · · · · · ·
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	TS:			
COMMENTS:						<del></del>		
			· · · · · · · · · · · · · · · · · · ·					
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	(NONE)	RP- ACT:	RP-BD
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
NEHEAT COIL								
COMMENTS:							RP-ACT = Replace	Actuator
							RP-ACT = Replace	
COMMENTS:  AHU PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:  AHU PUMP MOTOR  AHU PUMP SEALS	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:				
COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS								
COMMENTS:  AHU PUMP MOTOR  AHU PUMP SEALS								
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:								
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:				SIZE:	ED QUANTITY:			
COMMENTS:  AHU PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN

CHECKED BY:

AJN

OCATION: FT. RILET, N	CHONIA								
			BLDG:	7616			FILE:	7616.XLS	;
<u> </u>	REFRIGE	RATION E	QUIPMEN	NT - HVAC	UPGR	ADE OBS	ERVATION	ONS	
CHILLER / EQUIP. NO.		CH-1	LOCATION			CU OUTSIDE			
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	TSI / BOHN		MODEL:	SC2CD70		
C-WCT = Centrifugal w/ W	Vater Side Co	ooling Tower		R-ACCU = Re	•	-		-	
R-WCT = Reciprocating w			r	ASB-WCT = A	bsorption	w/ Water Side	Cooling To	ver	
ACCU = Air Cooled Conde	ensing Unit			CT = Cooling	Tower				
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:				
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:				
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:				
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:				
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:	TYP OF 4;	2 UNITS		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	;	SIZE:				
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:				
COMMENTS:	140		4-14						
COOLING TOWER	N/A:	lok:	REPLACE:		SIZE:				
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:				
	JIN/A.	JON. A	MEPLACE.		JIZL.				
COMMENTS:							·. ·		
CHILLER INSUL.	N/A: X	OK:	MISSING:		STIMATI	ED QUANTITY	<b>'</b> :		
CHW PIPE INSUL.	N/A:	OK: X	MISSING:		STIMATI	D QUANTITY	<b>'</b> :		
COMMENTS:	DAMAGE	D INSULATION	ON CHW PU	IMP					
	4.4								
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:	1.5 HP			
CHW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:				
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	Ī	SIZE:	3 HP			
CHW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:			****	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:				
CHW PUMP SEALS	N/A:	ок:	REPLACE:		SIZE:		<del></del>		-
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:				
CHW PUMP SEALS	N/A:	ок:	REPLACE:		SIZE:				
COMMENTS:									
						·			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7616

FILE:

CONVERTER TYPE: STM/HW MFG: MODEL: STMSteam STM/HW - Steam to Hot Water Conv. STM/HW/STM High Temp HW to Steam Convertor HW - Hot Water STM/HW/HW - High Temp, HW to HW Cv. SDHW - Domestic Hot Water Convertor SOILER BURNER JATMOSPHERIC: POWER: X OK: X JREPLACE: COMMENTS: ASBESTOS ON TANKS; TYPICAL OF TWO TANKS.  SUR PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:  SUR PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS:  SUR RUMP SEALS N/A: OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X REPLACE: SIZE: 2 HP HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED, RUSTED  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: 1/12 HP  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: 1/12 HP  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: 1/12 HP  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: SIZE: 1/12 HP  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: SIZE: 1/12 HP  CV PUMP SEALS N/A: OK: X MISSING: ESTIMATED QUANTITY:		BOII E	D & CON	VEDTED	1010 1010 1010		E OBSEDI	/ATIONS	7616.XLS
BOILER TYPE:  CONVERTER TYPE:  STM/HW MFG: KEWANEE   MODEL: M-235-KX   MODEL:  STM/HW HG: MFG: KEWANEE   MODEL: M-235-KX   MODEL:  STM/HW HG: MFG: MFG: MFG: MODEL: M-235-KX   MODEL:  STM/HW HG: MFG: MFG: MFG: MFG: MFG: MFG: MFG: MF	DOI! EDICONVEDTED NO						E OBSEKI	ATIONS	
CONVERTER TYPE: STM/HW MFG:: MODEL: STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/STM High Temp HW to Steam Convertor HW - Hot Water Conv. HTHW/HW - High Temp HW to Steam Convertor HW - Hot Water Convertor HHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER JATMOSPHERIC: POWER: X JOK: X JREPLACE:  COMMENTS: ASBESTOS ON TANKS; TYPICAL OF TWO TANKS.  BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE:  COMMENTS: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZ		<u>'.                                    </u>	BLR-1		· ,	MER	1		***************************************
STM - Steam   STM/HW - Steam to Hot Water Conv.   HTHW/STM - High Temp HW to HW Cv.   DHW - Domestic Hot Water Convertor   BOILER BURNER   JATMOSPHERIC:   POWER: X   OK: X   REPLACE:   COMMENTS:   ASBESTOS ON TANKS; TYPICAL OF TWO TANKS.  BLR PUMP MOTOR   BLR PUMP MOTOR   BLR PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   COMMENTS:    BLR INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   PIPE INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   DIAM PUMP MOTOR   HW PUMP MOTOR   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   DIAM PUMP MOTOR   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   RUSTED   COMMENTS:    COMMENTS:    COMMENTS:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   RUSTED   COMMENTS:   OK: X   REPLACE:   SIZE:   OK: X   RUSTED   RUSTED   RUSTED   OK: X   RUSTED   RUSTED   RUSTED   OK: X   RUSTED   RUS			0714894		KEWANEE			M-235-KX	
HW-Hot Water HTHW/HW- High Temp. HW to HW Cv. IDHW - Domestic Hot Water Convertor BOILER BURNER JATMOSPHERIC: POWER: X OK: X JREPLACE: COMMENTS: ASBESTOS ON TANKS, TYPICAL OF TWO TANKS.  BLR PUMP MOTOR NA: X OK: REPLACE: SIZE: SIZE: SIZE: SIZE: COMMENTS:  BLR PUMP SEALS NA: X OK: REPLACE: SIZE:	OT14###		1						
BOILER BURNER JATMOSPHERIC: POWER: X OK: X REPLACE:  COMMENTS: ASBESTOS ON TANKS; TYPICAL OF TWO TANKS.  BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE: BLR PUMP SEALS N/A: X OK: REPLACE: SIZE:  COMMENTS:  BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 5 HP HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 9 HWP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 9 HWP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 5 HP  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 9 HWP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  COMMENTS:  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: PUMP UN-INSULATED, RUSTED  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: PUMP UN-INSULATED, RUSTED  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: SIZE: SIZE: COMMENTS:  CV PUMP MOTOR N/A: OK: REPLACE: SIZE:									n Convertor
ASBESTOS ON TANKS; TYPICAL OF TWO TANKS.  BLR PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   BLR PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   COMMENTS:   SIZE:   COMMENTS:    BLR INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   PIPE INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   COMMENTS:   SIZE:   2 HP   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   2 HP   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   PUMP UN-INSULATED, RUSTED   COMMENTS:   OK: X   REPLACE:   SIZE:   SIZE:   PUMP UN-INSULATED, RUSTED   COMMENTS:   OK:   REPLACE:   SIZE:   SI									
BLR PUMP MOTOR BLR PUMP SEALS N/A: X OK: REPLACE: SIZE:  COMMENTS:  BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:  PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 2 HP HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  COMMENTS:  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: PUMP UN-INSULATED  N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  COMMENTS:  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: PUMP UN-INSULATED  COMMENTS:  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: PUMP UN-INSULATED  CV PUMP SEALS N/A: OK: REPLACE: SIZE: SIZE: PUMP UN-INSULATED  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: PUMP UN-INSULATED  CV PUMP SEALS N/A: OK: REPLACE: SIZE: S							X	REPLACE:	
BLR INSULATION	COMMENTS:	ASBESTO	OS ON TANK	S; TYPICAL OF	TWO TANKS	<u> </u>			
BLR PUMP SEALS									
BLR INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   PIPE INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:    COMMENTS:  HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: 2 HP   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED, RUSTED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED, RUSTED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED, RUSTED   COMMENTS:  CV PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   1/12 HP   CV PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   SIZE:   COMMENTS:   10' OF INSULATION @ 4" MISSING EACH PUMP   (2 VALVES & 1 STRAINER)	BLR PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
BLR INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   PIPE INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   COMMENTS:    HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: 2 HP   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   COMMENTS:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   CV PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   PUMP UN-INSULATED   CV PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   SIZE:   PUMP UN-INSULATED   CV PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   SIZE:   SIZE:   COMMENTS:   OF INSULATION @ 4* MISSING EACH PUMP   (2 VALVES & 1 STRAINER)	BLR PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:		****	
PIPE INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: 2 HP   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED, RUSTED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: 2 HP   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   COMMENTS:  CV PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE: PUMP UN-INSULATED, RUSTED   COMMENTS:   SIZE:   SIZ	COMMENTS:								
PIPE INSULATION   N/A: OK: X   MISSING:   ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: 2 HP   HW PUMP SEALS   N/A: OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: PUMP UN-INSULATED, RUSTED   HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: 2 HP   HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: PUMP UN-INSULATED   HW PUMP MOTOR   N/A: OK: X   REPLACE:   SIZE: 5 HP   HW PUMP SEALS   N/A: OK: X   REPLACE:   SIZE: PUMP UN-INSULATED, RUSTED   COMMENTS:  CV PUMP MOTOR   N/A: OK:   REPLACE:   SIZE: 1/12 HP   CV PUMP SEALS   N/A: OK:   REPLACE:   SIZE:   SIZE:   COMMENTS:   10' OF INSULATION @ 4' MISSING EACH PUMP   (2 VALVES & 1 STRAINER)									
COMMENTS:  HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED, RUSTED HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED, RUSTED HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED, RUSTED COMMENTS:  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: 1/12 HP CV PUMP SEALS N/A: OK: REPLACE: SIZE: SIZE: COMMENTS: 10' OF INSULATION @ 4' MISSING EACH PUMP (2 VALVES & 1 STRAINER)  CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:		N/A:	OK: X	MISSING:		ESTIMAT	ED QUANTITY	<b>/</b> :	
HW PUMP MOTOR	PIPE INSULATION	N/A:	OK: X	MISSING:		ESTIMAT	ED QUANTITY	<b>/</b> :	
HW PUMP SEALS	COMMENTS:								
HW PUMP MOTOR									
HW PUMP SEALS  N/A:  OK: X  REPLACE:  SIZE:  PUMP UN-INSULATED, RUSTED  N/A:  OK: X  REPLACE:  SIZE:  PUMP UN-INSULATED, RUSTED  RUSTED  N/A:  OK: X  REPLACE:  SIZE:  PUMP UN-INSULATED  N/A:  OK: X  REPLACE:  SIZE:  PUMP UN-INSULATED  N/A:  OK: X  REPLACE:  SIZE:  PUMP UN-INSULATED  N/A:  OK: X  REPLACE:  SIZE:  PUMP UN-INSULATED, RUSTED  CV PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  1/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  1/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  N/A:  OK:  REPLACE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  N/A:  OK:  REPLACE:  SIZE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  SIZE:  SIZE:  SIZE:  I/12 HP  CV PUMP SEALS  N/A:  OK:  SIZE:  PUMP UN-INSULATED, RUSTED  N/A:  SIZE:  PUMP UN-INSULATED, RUSTED  SIZE:  PUMP UN-INSULATED, RUSTED  SIZE:  PUMP UN-INSULATED, RUSTED  SIZE:  PUMP UN-INSULATED  N/A:  SIZE:  PUMP UN-INSULATED  N/A:  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  PUMP UN-INSULATED  SIZE:  SIZE:  PUMP UN-INSULATED  SIZE:  SIZE:  SI								INSULATED	
HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED, RUSTED  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: 1/12 HP  CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS:  CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SI									
HW PUMP SEALS  N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED  HW PUMP MOTOR  N/A: OK: X REPLACE: SIZE: 5 HP  HW PUMP SEALS  N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED, RUSTED  COMMENTS:  CV PUMP MOTOR  N/A: OK: REPLACE: SIZE: 1/12 HP  CV PUMP SEALS  N/A: OK: REPLACE: SIZE:  COMMENTS: SIZE: 1/12 HP  (2 VALVES & 1 STRAINER)  CV INSULATION  N/A: OK: X MISSING EACH PUMP  (2 VALVES & 1 STRAINER)								INSULATED,	RUSTED
HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: 5 HP HW PUMP SEALS N/A: OK: X REPLACE: SIZE: PUMP UN-INSULATED, RUSTED  COMMENTS:  CV PUMP MOTOR N/A: OK: REPLACE: SIZE: 1/12 HP CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: 10' OF INSULATION @ 4" MISSING EACH PUMP (2 VALVES & 1 STRAINER)  CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:									
HW PUMP SEALS  N/A:  OK: X  REPLACE:  SIZE: PUMP UN-INSULATED, RUSTED  CV PUMP MOTOR  N/A:  OK: REPLACE:  SIZE: 1/12 HP  CV PUMP SEALS  N/A:  OK: REPLACE:  SIZE: 1/12 HP  CV PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  COMMENTS:  10' OF INSULATION @ 4" MISSING EACH PUMP  (2 VALVES & 1 STRAINER)  CV INSULATION  N/A:  OK: X  MISSING:  ESTIMATED QUANTITY:								INSULATED	
CV PUMP MOTOR N/A: OK: REPLACE: SIZE: 1/12 HP CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: 10' OF INSULATION @ 4" MISSING EACH PUMP (2 VALVES & 1 STRAINER)  CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:		11							
CV PUMP MOTOR  N/A: OK: REPLACE: SIZE: 1/12 HP  CV PUMP SEALS  N/A: OK: REPLACE: SIZE:  COMMENTS: 10' OF INSULATION @ 4" MISSING EACH PUMP  (2 VALVES & 1 STRAINER)  CV INSULATION  N/A: OK: X MISSING: ESTIMATED QUANTITY:		JIN/A:	JOK: X	REPLACE:		SIZE:	PUMP UN-	INSULATED,	RUSTED
CV PUMP SEALS  N/A: OK: REPLACE: SIZE:  COMMENTS: 10' OF INSULATION @ 4" MISSING EACH PUMP  (2 VALVES & 1 STRAINER)  CV INSULATION  N/A: OK: X MISSING: ESTIMATED QUANTITY:	COMMENTS:						-		
CV PUMP SEALS  N/A: OK: REPLACE: SIZE:  COMMENTS: 10' OF INSULATION @ 4" MISSING EACH PUMP  (2 VALVES & 1 STRAINER)  CV INSULATION  N/A: OK: X MISSING: ESTIMATED QUANTITY:	CV PUMP MOTOR	N/A:	Іок:	REPLACE:		ISIZE	1/12 HP		
COMMENTS: 10' OF INSULATION @ 4" MISSING EACH PUMP (2 VALVES & 1 STRAINER)  CV INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:							***************************************		
(2 VALVES & 1 STRAINER)  CV INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:					ACH PUMP	1			
1 I I I I I I I I I I I I I I I I I I I									
CV DIDE INCHI	CV INSULATION	N/A:	OK: X	MISSING:		ESTIMAT	ED QUANTITY	<del>/</del> :	
CV FIFE INSUL.   IN/A.   OK:   IMISSING: X   IESTIMATED QUANTITY: 20 (a) 3"	CV PIPE INSUL.	N/A:	OK:	MISSING:	Х	ESTIMAT	ED QUANTITY	<u>':</u>	20' @ 3"
COMMENTS:	COMMENTS:			<del></del>		1			
			<u> </u>						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 9 Nov-94

CHECKED BY:

CWW AJN

BLDG:

7616

FILE:

	BOILE	R & CON	VERTER - H	VAC UPGRA	DE OBSEF	RVATIONS	
BOILER/CONVERTER NO	<u> </u>	BLR-2	LOCATION (R	M) MER			
BOILER TYPE:		STM	1	SAGE	MODEL:		
CONVERTER TYPE:		STM/HW	MFG.:		MODEL:		
STM - Steam	1 7		t Water Conv.		•	mp HW to Steam	Convertor
HW - Hot Water			o. HW to HW Cv.	DHW	<ul> <li>Domestic Hot \</li> </ul>	Vater Convertor	
BOILER BURNER	ATMOSPH	HERIC:	POWER: X	OK:	X	REPLACE:	
COMMENTS:							
		**********					
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		···· 1.185	****
COMMENTS:		1014.	THE BROE.				
JOIVIIVIENTS.							
		****	1.710.72			#	
BLR INSULATION	N/A:	OK: X	MISSING:	ESTI	MATED QUANTI	TY:	
PIPE INSULATION	N/A:	OK:	MISSING: X	ESTIN	MATED QUANTI	TY:	10' @ 3"
COMMENTS:							
HW PUMP MOTOR	N/A: X	ОК:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			12.14.00 T T T T
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:							
COMMENTS:							
	IIn/a· y	IOK:	IDEDI ACE:	IQ17E-	1/12 HD		
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X	OK: OK:	REPLACE:	SIZE:			
CV PUMP MOTOR			E .				
CV PUMP MOTOR CV PUMP SEALS			E .				
CV PUMP MOTOR CV PUMP SEALS			E .	SIZE:		TY:	
CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: X	OK:	REPLACE:	SIZE:			
CV PUMP MOTOR CV PUMP SEALS COMMENTS:  CV INSULATION CV PIPE INSUL.	N/A: X	OK:	REPLACE:	SIZE:	MATED QUANTI		
CV PUMP MOTOR CV PUMP SEALS COMMENTS: CV INSULATION	N/A: X	OK:	REPLACE:	SIZE:	MATED QUANTI		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 9 Nov-94 CWW

CHECKED BY:

AJN

BLDG:

7616

FILE:

STM - Steam   STM/HW - Steam to Hot Water Conv.   HTHW/STM - High Temp HW to Steam Convertor   HV - Hot Water   HTHW/HW - High Temp. HW to HW cv.   DHW - Domestic Hot Water Convertor   DHW - Domes					UPGRADE OBSERVATIONS	
MODEL:   STM:HW   MFG:		).	CV-1			
STM - Steam   STM/HW - Steam to Hot Water Conv.   HTHW/STM - High Temp HW to Steam Convertor   HTHW HW HW - High Temp. HW to HW Cv.   DHW - Domestic Hot Water Convertor   DHW - Domestic Hot Water						
HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNIER (ATMOSPHERIC: POWER: OK: REPLACE: COMMENTS:  BLR PUMP MOTOR NA: X OK: REPLACE: SIZE: SIZE: SIZE: COMMENTS:  BLR INSULATION NA: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: S				•		
BOILER BURNER JATMOSPHERIC: POWER: OK: REPLACE:  COMMENTS:  BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE: BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:  BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS:  HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:  CV PUMP MOTOR N/A: OK: REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CV PUMP MOTOR N/A: OK: X MISSING: ESTIMATED QUANTITY:  CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY:						
BUR PUMP MOTOR						
BLR PUMP MOTOR  BLR PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  BLR INSULATION  N/A: X OK: MISSING: ESTIMATED QUANTITY:  PIPE INSULATION  N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP SEALS  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  HW PUMP MOTOR  N/A: X OK: REPLACE: SIZE:  COMMENTS:  CV PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: X OK: X REPLACE: SIZE:  CV PUMP SEALS  N/A: X OK: X REPLACE:		ATMOSPH	HERIC:	POWER:	OK: REPLACE:	
BLR PUMP SEALS	COMMENTS:					
BLR PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  BLR INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:  PIPE INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:    COMMENTS:  CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:  CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:   SIZE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   20' @ 3'			***************************************			
BLR PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  BLR INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:  PIPE INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:    COMMENTS:  CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:  CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:   SIZE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   20' @ 3'	***************************************					
BLR PUMP SEALS  N/A: X OK: REPLACE: SIZE:  COMMENTS:  BLR INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:  PIPE INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:    HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:    COMMENTS:  CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:  CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    COMMENTS:   SIZE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CV PUMP SEALS   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   20' @ 3'						
BLR INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:   PIPE INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:   COMMENTS:  HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP MOTOR   N/A: X   OK:   REPLACE:   SIZE:   HW PUMP SEALS   N/A: X   OK:   REPLACE:   SIZE:   COMMENTS:  CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   CV PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   CV PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   CV PUMP SEALS   N/A:   OK: X   SIZE:						
BLR INSULATION   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:		N/A: X	JOK:	REPLACE:	SIZE:	
PIPE INSULATION         N/A: X         OK:         MISSING:         ESTIMATED QUANTITY:           COMMENTS:         COMMENTS:         IMA: X         OK:         REPLACE:         SIZE:           HW PUMP MOTOR         N/A: X         OK:         REPLACE:         SIZE:           HW PUMP SEALS         N/A: X         OK:         REPLACE:         SIZE:           COMMENTS:         N/A: X         OK:         REPLACE:         SIZE:           CV PUMP MOTOR         N/A: OK: X         REPLACE:         SIZE:           CV PUMP SEALS         N/A: OK: X         REPLACE:         SIZE:           COMMENTS:         SIZE:         SIZE:           CV PUMP SEALS         N/A: OK: X         REPLACE:         SIZE:           CV PUMP SEALS         N/A: OK: X         REPLACE:         SIZE:           CV PUMP SEALS         N/A: OK: X         REPLACE:         SIZE: </td <td>COMMENTS:</td> <td></td> <td></td> <td></td> <td></td> <td></td>	COMMENTS:					
PIPE INSULATION						
PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:  COMMENTS:  HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X MISSING: ESTIMATED QUANTITY: 20'@ 3'	DI DINOLII ATION	76.74	101/	husonio	TOTAL ATERNATION	
HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS:  CV INSULATION N/A: OK: X REPLACE: SIZE: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 20 @ 3*						
HW PUMP MOTOR N/A: X   OK: REPLACE: SIZE: HW PUMP SEALS N/A: X   OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X   OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X   OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X   OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X   OK: REPLACE: SIZE: HW PUMP SEALS N/A: X   OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X   OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X   OK: REPLACE: SIZE: SIZE: HW PUMP SEALS N/A: X   OK: REPLACE: SIZE:		N/A: X	_lok:	MISSING:	JESTIMATED QUANTITY:	
HW PUMP SEALS	COMMENTS:					
HW PUMP SEALS						
HW PUMP SEALS						
HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: 1/12 HP CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 20'@ 3"						
HW PUMP SEALS						
HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:  CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: 1/12 HP CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:  CV PUMP MOTOR N/A: OK: MISSING: ESTIMATED QUANTITY: 20' @ 3"	HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	
HW PUMP MOTOR	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
HW PUMP SEALS	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
CV PUMP MOTOR	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
CV PUMP MOTOR	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CV PUMP SEALS         N/A:         OK: X         REPLACE:         SIZE:           COMMENTS:	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CV PUMP SEALS         N/A:         OK: X         REPLACE:         SIZE:           COMMENTS:         CV INSULATION         N/A:         OK: X         MISSING:         ESTIMATED QUANTITY:           CV PIPE INSUL.         N/A:         OK:         MISSING: X         ESTIMATED QUANTITY:         20' @ 3"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CV PUMP SEALS         N/A:         OK: X         REPLACE:         SIZE:           COMMENTS:         CV INSULATION         N/A:         OK: X         MISSING:         ESTIMATED QUANTITY:           CV PIPE INSUL.         N/A:         OK:         MISSING: X         ESTIMATED QUANTITY:         20' @ 3"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CV INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:   CV PIPE INSUL.   N/A:   OK:   MISSING: X   ESTIMATED QUANTITY:   20' @ 3"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CV INSULATION   N/A:   OK: X   MISSING:   ESTIMATED QUANTITY:  CV PIPE INSUL.   N/A:   OK:   MISSING: X   ESTIMATED QUANTITY: 20' @ 3"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE	
CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 20' @ 3"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE	
CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 20' @ 3"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE	
CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 20' @ 3"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE:   SIZE	
	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A:   OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:		
COMMENTS:	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A: X   N/A:   OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:		
	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: X	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/CWW/AJN

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NAME: ENL BARRACKS W/O DIN BLDG NUMBER: 7810 CONDITIONED SQFT: ELECTRIC METER: Y

SUSPECT ACM: Y

GAS METER: Y

## **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO:

MON: TUE: WED: THUR: FRI: SAT: SUN: 0 PRES START: 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 0 0 0 0 0 0 0 REQ START: 24 24 24 24 24 24 24 REQ STOP:

#### **REMARKS:**

Suspect ACM located on DHW storage tanks

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS PREPARED BY: JM/CWW/AJN

7 (11 ( ) )	THE BUILD ONLY O	OICTET OBOLICTATIONS	
BUILDING NUMBE	R: 7810		
AHU NUMBE	R: AHU-1	AHU LOCATION: MER NORTH	
REFRIG SYS # SRVNG A	.HU: CH-1	SERVES AREA: HALLWAYS	
	% OF BLD	OG AREA HEATED:	5
AHU UNIT TYPE SING	LE ZONE	NUMBER OF ZONES IF MZ UNIT:	0
CFM-HTG:	3,500	CFM-CLG: 3,500	<del>.</del>
MIN %OA:	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	MAX %OA: 100	
NAMEPLATE			
UNIT MFG:	AIRTHERM	UNIT MODEL: L0815	· · · · · · · · · · · · · · · · · · ·
SUPPLY FAN HP:		RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	8-33-1260-03	RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE	П	
HEATING COIL:	<u> </u>	—; <b>T</b>	
REHEAT COIL:			
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE		-	
DAY SCHEDULE NO:	10	MONTH SCHEDULE NO:	3
SCHEDULE COMMENTS:	1		
SUN:	MON: TUE: WED: T	HUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0	
PRES STOP: 24	24 24 24	24 24 24	•
REQ START: 0	0 0 0	0 0	
REQ STOP: 24	24 24 24	24 24 24	!
MONTHS JAN: FEB:	MAR: APR: MAY: JUN:	: JUL: AUG: SEP: OCT: NOV: DEC:	:
ON:			
CONTROLS			
TYPE OF CON	TROLS: PNEUMATIC	THERMOSTAT TYPE: OTHER	
PRESENT TEMP WINT	R OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR L	JNOCC: 0	COLD DECK DEG F: MIXED AIR DEG F:	0
PRESENT TEMP SU	M OCC: 0	OTHER SETPOINT DESCRIP:	<u> </u>
PRESENT TEMP SUM L		OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTRO	L: N MIXED AIR DMPF	R CONTROL: N IMPLEMENT DEMAND LIMIT C	NTRLS? N
MAX OA DMPR CONTRO			CLOCK: N
RET AIR DMPR CONTRO			=
EXH AIR DMPR CONTRO			
OTHER CONTROLS (	DESCR:		
CONTROLS COM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/10/94 PREPARED BY: JM/CWW/AJN

AID HANDLING LINIT CLIDVEY ORCEDIATIONS

AIR	IANDLING UNI	I SURVET UD	SEKVATIONS	
BUILDING NUMBE	R: 7810			
AHU NUMBE	ER: AHU-2	AHU LOCATION	I: MER SOUTH	<del></del>
REFRIG SYS # SRVNG	AHU: CH-1	SERVES AREA:	HALLWAYS	
	% C	OF BLDG AREA HEATED:	1	5.
AHU UNIT TYPE SING	SLE ZONE	, NU	IMBER OF ZONES IF MZ	UNIT: 0
CFM-HTG	3,500	CFM-CLG:	3,500	
MIN %OA	: 100	MAX %OA:	0	
NAMEPLATE				
UNIT MFG	: AIRTHERM	UN	T MODEL: L0815	
SUPPLY FAN HP	):1	RET/EX	H FAN HP:	0
SUPPLY FAN MTR MFG	: CENTURY	RET/EXH FAN		
SUPPLY FAN MTR MODEL		RET/EXH FAN MT	R MODEL:	
COMMENTS	:	****		<u> </u>
COILS				
Coil	Coil Type	Modulating	Valve?	
PREHEAT COIL	.: NONE			
HEATING COIL	: DUAL TEMP WATER			
REHEAT COIL		<u> </u>		
HUMIDIFIER				
COOLING COIL	.: <u>CW</u>	<b>L_J</b>		
SCHEDULE				
DAY SCHEDULE NO:	10		MONTH SCHEDULE N	O: 3
SCHEDULE COMMENTS:				
SUN:	MON: TUE: WE	D: THUR: FRI:	SAT:	
PRES START: 0	0 0	0 0 0	0	
PRES STOP: 24	24 24	24 24 24	24	
REQ START: 0	0 0	0 0 0	0	'
REQ STOP: 24	24 24	24 24 24	24	
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT: NOV:	DEC:
ON: □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□				
CONTROLS				
TYPE OF COM	NTROLS: PNEUMATIC		OTHER	;
PRESENT TEMP WIN	TR OCC:	0	DECK DEG F:	<u> </u>
PRESENT TEMP WINTR		COLD	DECK DEG F:	0
POPOPUT TELLO O	W occ.		ED AIR DEG F:	<u>0</u>
PRESENT TEMP SU PRESENT TEMP SUM		0 OTHER SETPO	POINT DESCRIP:	0
		R DMPR CONTROL:	IMPLEMENT DEMAND	LIMIT CNTRLS?
MIN OA DMPR CONTRO		ZER DB CONTROL: N	IMPLEMENT DEMAND	TIME CLOCK: N
RET AIR DMPR CONTRO		ZER UB CONTROL: N	TIME OLOCK	OPERATIONAL?
EXH AIR DMPR CONTRO	<b></b>	LER WE CONTROL.	. MIL OLOGIC	o. Electionari [ii
OTHER CONTROLS	DESCR:			i

**CONTROLS COMMENTS:** 

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/CWW/AJN

7(11(11)(10=1110	<u> </u>
BUILDING NUMBER: 7810  AHU NUMBER: FC-1	AHU LOCATION: THROUGHOUT BLDG
REFRIG SYS # SRVNG AHU: CH-1	SERVES AREA: ALL  % OF BLDG AREA HEATED: 70
AHU UNIT TYPE FAN COILS - 2 PIPE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: 41	,400 <b>CFM-CLG</b> : 41,400
MIN %OA:	0 MAX %OA: 0
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP:	7.5 RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: DUAL TEMP WA	TER
REHEAT COIL: NONE	
HUMIDIFIER: NONE	. 🔲
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 10	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON: TUE:	WED: THUR: FRI: SAT:
PRES START: 0 0 0	0 0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 0 0	$\frac{24}{0}$ $\frac{24}{0}$ $\frac{24}{0}$ $\frac{24}{0}$
REQ STOP: 24 24 24	24 24 24 24
ON:	MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF CONTROLS: ELECTR	
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	O COLD DECK DEG F: 0  MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DESCRIP. 0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXE	ED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: Y ECO	NOMIZER DB CONTROL: N TIME CLOCK:
RET AIR DMPR CONTROL: N ECO	NOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: JM/CWW/AJN

BUILDING NU	-	7810				ŀ	BOILER	RM LOCA	ATION:	MER		
OILER UN	NIT											
SOURCE OF	BLDG HEA	λт	BLR/CON	IVERTER	SERVE	S ARE	A OR SE	ERVICE:	ALL			
BOILER	R TAG:	BLR-1 HW (UP TO	250 DEG)	CONVERTER CONVERTER TAG: CONVERTER TYPE: CONV HT SOURCE:								
CENTRAL												
AMEPLAT	ΓΕ				% ARI	EA HE	ATED BY	/ BB RAI	DIATION:			20
	KEWANEE M-235-KX				E			PUT (BTU PUT (BTU			2,350,000 2,938,000	
CHEDULE DAYS SCHEDU CHEDULE COMM	LE NO:	10						MONTH	I SECHD	ULE NO		1
PRES START: PRES STOP: REQ START: REQ STOP:	SUN: 0 24 0 24	MON: 0 24 0 24	TUE: 0 24 0 24	WED: 24 0	2	Q: 0 24 0	FRI:  0 24 0 24	SAT: 0 24 0 24				
MONTHS JAN: ON:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	ост: ⊠	NOV:	DEC:	- - -
ONTROLS	S	<u> </u>	· · · · · · · · · · · · · · · · · · ·									
TYPE OF OPER TYPE OF BUF	PNEUM		EG F or	PSIG		RESE	T CONTR	ROLS: [	Ÿ			
CONTR	ROLS COM	MENTS:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: JM/CWW/AJN

BUILDING NUMBER: 7810	BOILER RM LOCATION: MER
BOILER UNIT	
	R SERVES AREA OR SERVICE: DHW
● ⊠ BOILER	CONVERTER
BOILER TAG: BLR-2 BOILER TYPE: MED PRESS STEAM (15# TO 125#	CONVERTER TAG:  CONVERTER TYPE:
FUEL TYPE: NAT. GAS	CONV HT SOURCE:
CENTRAL PLANT DIRECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION: 0
BOILER MFG: OSAGE	BLR CAP OUTPUT (BTUH): 1,939,200
UNIT MODEL: 60-15	BLR CAP INPUT (BTUH): 2,424,000
COMMENTS:	
SCHEDULE	
	MONTH SECHDULE NO: 3
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:	WION I'M SECHDULE NO. 3
SUN: MON: TUE: WED	
PRES START: 0 0 0 0  PRES STOP: 24 24 24 24 24	
REQ START: 0 0 0 0	
REQ STOP: 24 24 24 24	4 24 24 24
	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: XXXXXX	
CONTROLS	
	RESET CONTROLS: N DEG F or PSIG
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: JM/CWW/AJN

BUILDING NUMBER: 78	BOILER RM LOCATION: MER	
BOILER UNIT		
DOILLIN OILLI	DI DICOMMEDITED CEDITED AREA OR CEDITICE.	
SOURCE OF BLDG HEAT	BLR/CONVERTER SERVES AREA OR SERVICE:	
BOILER	CONVERTER	_ :
BOILER TAG:	CONVERTER TAG:	:
BOILER TYPE:	CONVERTER TYPE:	
FUEL TYPE:	CONV HT SOURCE:	
		_
CENTRAL PLANT DI	RECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION:	
BOILER MFG:	BLR CAP OUTPUT (BTUH):	
UNIT MODEL:	BLR CAP INPUT (BTUH):	
COMMENTS:		
SCHEDULE		
DAYS SCHEDULE NO:	10 MONTH SECHDULE NO: 3	
SCHEDULE COMMENTS:		
SUN:	MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0	0 0 0 0 0	
PRES STOP: 24	<u>24 24 24 24 24 24 24 </u>	
REQ START: 0	0 0 0 0	
REQ STOP: 24	24 24 24 24 24	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
ON:		
CONTROLS		
TYPE OF BLR CONT	TROLS: RESET CONTROLS: N	
OPERATING SET		
TYPE OF BURNER CONT	rols:	
CONTROLS COM	MENTS:	- ا
HW PUMP		
PUMP TAG: DTWP-1	PUMP HP: 2 PUMP MFG: CENTURY	
PUMP SERVICE: DUAL TE	MP PUMP MODEL: 5C-184-KMA	l
HW PUMP		
PUMP TAG: DTWP-2	PUMP HP: 2 PUMP MFG: CENTURY	
PUMP SERVICE: DUAL TEL		7

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: JM/CWW/AJN

HW PUMP					
PUMP TAG:	DTWP-3	PUMP HP:	2	PUMP MFG:	CENTURY
PUMP SERVICE:	DUAL TEMP PUMP			PUMP MODEL:	5C-184-KMA
HW PUMP					
PUMP TAG:	DTWP-4	PUMP HP:	3	PUMP MFG:	CENTURY
PUMP SERVICE:	DUAL TEMP PUMP			PUMP MODEL:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/10/94

PREPARED BY: JM/CWW/AJN

# PERIMETER RADIATION SURVEY OBSERVATIONS

								ENU DAT	D 4 O 1 C	MIO DIN			
BLDG NUMB		7810				BLDG N				W/O DIN			
PER RAD (S	YSTE	vi TAG) NO	: RAD	-1				YS LOCA		VESTIBU	LES, TOI	LEIS	
SOUR	CE OF	HEATING	: BLR	-1		· · · · · · ·	S	SERVES A	AREA:				
RADIA	TION I	JNIT TYPE	: HW					% AREA	HTG:		2	0	
RADIATI	ON	PUMF	<u> </u>										
PUMP TA	G: 1			PUM	P HP:	0.	75	PUMP	MFG:	RELIANC	E		
					•			PUMP M	ODEL:	442775-G	Т		
SCHEDL	JLE												
DAYS	SCH	EDULE NO	):	10	= ! -	MON	NTHS SC	CHEDULE	NO:		1		
SCHEDU	JLE C	OMMENTS	:										
		SUN:	MON:	TUE:	WE	D: TH	IUR:	FRI:	SAT:				
PRES STA	RT:	0	0	0		0	0	0	0.				
PRES ST	OP:	24	24	24	2	24	24	24	24				
REQ STA	RT:	0	0	0		0	0	0	0				
REQ ST	OP:	24	24	24	2	24		24	24				
	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	,
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$						$\boxtimes$	$\boxtimes$		
CONTRO	DLS												
TYPE	OF R	AD. CONT	ROLS:										
ı	RADIA	TION CON	TROL:	NONE									
	OC	C HT SPA	CE SP:		0								
		C HT SPA			0			F	RESET C	ONTROL:	N		
c	ONTR	OL COMM	IENTS:	3 WAY	PNEUM	ATIC C	ONTROL	VALVE	IM MER				_

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: JM/CWW/AJN

# REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

MONTHS JAN: FEB: MAR: APR: MAY: JUN: ON:	TOWER MFG: # OF TOWER FAN V: TOWER FAN AMPS: TOWER FAN HP:  MONTHS SCHEDU	BOHN	MER AHU'S & F	4 208 7.2 1.5
CHILLER MFG: TSI	AHU'S SE COOLED CONDENSIN  TOWER MFG: # OF TOWER FANS: TOWER FAN AMPS: TOWER FAN HP:  MONTHS SCHEDU R: FRI: SAT:	BOHN	AHU'S & F	4 208 7.2
CHILLER MFG: TSI	TOWER MFG: # OF TOWER FAN V: TOWER FAN AMPS: TOWER FAN HP:  MONTHS SCHEDU	BOHN	2	208 7.2
CHILLER MFG: TSI CHILLER MODEL: SC2CD70 CHILLER SERIAL NO: 9836-1 CHILLER V: 208 CHILLER AMPS: 300 CHILLER PH: 0 CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUF PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 REQ START: 0 0 0 0 0 REQ STOP: 24 24 24 24 24 24  MONTHS JAN: FEB: MAR: APR: MAY: JUN: ON:	# OF TOWER FANS: TOWER FAN V: TOWER FAN AMPS: TOWER FAN HP:  MONTHS SCHEDU		2	208 7.2
CHILLER MODEL: SC2CD70  CHILLER SERIAL NO: 9836-1  CHILLER V: 208  CHILLER AMPS: 300  CHILLER PH: 0  CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10  SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUE  PRES START: 0 0 0 0 0  PRES STOP: 24 24 24 24 24 24  REQ START: 0 0 0 0 0  REQ STOP: 24 24 24 24 24 24  MONTHS JAN: FEB: MAR: APR: MAY: JUN: ON:	# OF TOWER FANS: TOWER FAN V: TOWER FAN AMPS: TOWER FAN HP:  MONTHS SCHEDU		2	208 7.2
CHILLER MODEL: SC2CD70  CHILLER SERIAL NO: 9836-1  CHILLER V: 208  CHILLER AMPS: 300  CHILLER PH: 0  CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10  SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUE  PRES START: 0 0 0 0 0  PRES STOP: 24 24 24 24 24 24  REQ START: 0 0 0 0 0  REQ STOP: 24 24 24 24 24 24  MONTHS JAN: FEB: MAR: APR: MAY: JUN: ON:	# OF TOWER FANS: TOWER FAN V: TOWER FAN AMPS: TOWER FAN HP:  MONTHS SCHEDU		2	208 7.2
CHILLER V: 208 CHILLER AMPS: 300 CHILLER PH: 0 CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUE PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 REQ START: 0 0 0 0 0 REQ STOP: 24 24 24 24 24 24  MONTHS JAN: FEB: MAR: APR: MAY: JUN: ON:	TOWER FAN AMPS: TOWER FAN HP:  MONTHS SCHEDU  R: FRI: SAT:	LE NO:	2	7.2
CHILLER AMPS: 300 CHILLER PH: 0 CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUF PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 REQ START: 0 0 0 0 0 REQ STOP: 24 24 24 24 24 24  MONTHS JAN: FEB: MAR: APR: MAY: JUN: ON:	MONTHS SCHEDU	LE NO:	2	
CHILLER PH: 0 CHILLER CAP (TONS): 70  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUE PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 REQ START: 0 0 0 0 0 REQ STOP: 24 24 24 24 24 24  MONTHS JAN: FEB: MAR: APR: MAY: JUN: ON:	MONTHS SCHEDU	LE NO:	2	1.5
CHILLER CAP (TONS): 70  COMMENTS: 70  SCHEDULE  DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS: 10  SUN: MON: TUE: WED: THUE  PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	R: FRI: SAT:	LE NO:	2	
COMMENTS:    SCHEDULE   DAYS SCHEDULE NO:	R: FRI: SAT:	LE NO:	2	
DAYS SCHEDULE NO: 10   SCHEDULE COMMENTS:     SUN: MON: TUE: WED: THUE	R: FRI: SAT:	LE NO:	2	
DAYS SCHEDULE NO:         10           SCHEDULE COMMENTS:           SUN:         MON:         TUE:         WED:         THUF           PRES START:         0         0         0         0         0         0         PRES STOP:         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24 <t< td=""><td>R: FRI: SAT:</td><td>LE NO:</td><td>2</td><td></td></t<>	R: FRI: SAT:	LE NO:	2	
SCHEDULE COMMENTS:           SUN: MON: TUE: WED: THUE           PRES START:         0         0         0         0           PRES STOP:         24         24         24         24         24           REQ START:         0         0         0         0         0           REQ STOP:         24         24         24         24         24         2           MONTHS         JAN:         FEB:         MAR:         APR:         MAY:         JUN:           ON:         ON:         APR:         MAY:         JUN:         APR:         MAY:	R: FRI: SAT:	LE NO:	2	
PRES START:         0         0         0         0           PRES STOP:         24         24         24         24         24         2           REQ START:         0         0         0         0         0         0         0         0         REQ STOP:         24         24         24         24         24         24         24         24         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2 <t< td=""><td></td><td></td><td></td><td></td></t<>				
PRES START:         0         0         0         0           PRES STOP:         24         24         24         24         24         2           REQ START:         0         0         0         0         0         0         0         0         REQ STOP:         24         24         24         24         24         24         24         24         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2 <t< td=""><td></td><td></td><td></td><td></td></t<>				
PRES STOP:         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24	0 0 0			
REQ START:         0         0         0         0           REQ STOP:         24         24         24         24         24         2           MONTHS JAN:         FEB:         MAR:         APR:         MAY:         JUN:         ON:				
REQ STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24				
ON:	4 24 24			
ON:				<u> </u>
ON:	JUL: AUG: SEP	OCT:	NOV:	DEC:
				:
CONTROLS				
TYPE OF CONTROLS: ELECTRIC				
CWS SETPOINT: 0	CNWS SETPOINT			0
CWR SETPOINT: 0	CNWR SETPOINT			0
		•		
PRESS LITE HI: N TEMP LITE HI:	OTHER IN	DICATION	RS:	
PRESS LITE LOW: N TEMP LITE LOW:	N L			
PRESS GAUGES: N TEMP GAUGES:	N			
CONTROLS COMMENTS:				1
CW and CNW PUMPS				
PUMP TAG: 1 PUMP HP: 1.		: AURO	RA	
PUMP SERVICE: CW PUMP (Chilled Water)	5 PUMP MFG			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

7810

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

FILE: 7810.XLS

HU NO.:	FC-1	LOCATIO	G UNIT - HVAC		-1,00			
HU TYPE:	2P FC	MFG.:	TRANE		MODEL:			
SZ - Single Zone		iting & Vntltng		an Coil (Indicate	1	4P for 4 Pin	e)	
MZ - Mulitzone		able Air Vol.	,	Reheat System	2, 10, 21 ipo oi	11 101 11 10	~,	
DD - Dual Duct	.UH - Unit I			nduction System				
D.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	Ток:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damper Actuator	r
301111121110.				· · ·			RP-ACT = Replace Actuator	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:			MELY DIRTY ON BOTH	AHU'S				
JOHNETTO.								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		ICOMMENTS:				
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:		INC. DAGE		TOOMINE				
COMMENTS.								
		TOY Y	REPLACE:	SIZE:	CNTLVLV	NONE	RP- ACT: RP-	BD:
COOLING COIL	IN/A·	1( )K' X		10.22				BD:
COOLING COIL	N/A: N/A· X	OK: X		SIZE:	CNTLVLV	IIOK:	IRP- ACT: IRP-	
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP-	טט.
HEATING COIL PREHEAT COIL	N/A: X N/A: X	OK:		SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:		
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-	BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP-	BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- RP- ACT: RP- RP-ACT = Replace Actuator	BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7810

FILE:

COOLING TOWER   N/A:   OK:   X   REPLACE:   SIZE:   AIR COOLED COND.   N/A:   X   OK:   REPLACE:   SIZE:   COMMENTS:  CHILLER INSUL.   N/A:   X   OK:   MISSING:   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   MISSING:   X   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   MISSING:   X   ESTIMATED QUANTITY:   COMMENTS:  CHW PUMP MOTOR   N/A:   OK:   X   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   X   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:		KEFKIGE	KAHUN	EQUIPMENT - H	ITAG OF GRADE ODGERTA	TIONS
C-WCT = Centrifugal w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = Cooling Tower CC = C	CHILLER / EQUIP. NO.		CH-1	LOCATION (RM)	MER	
ASB-WCT = Reciprocating w/ Water Side Cooling Tower					4	
ACCU = Air Cooled Condensing Unit  CT = Cooling Tower  COMP. MOTOR  N/A:  OK: X REPLACE:  SIZE:  COMP. MOTOR  N/A: X OK: X REPLACE:  SIZE:  COMP. MOTOR  N/A: X OK: REPLACE:  SIZE:  COMP. MOTOR  N/A: X OK: REPLACE:  SIZE:  COMP. MOTOR  N/A: X OK: REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK: X REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK: X REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK: X REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK: X REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK: X REPLACE:  SIZE:  CTIACCU FAN MTR  N/A:  OK: X REPLACE:  SIZE:  COMMENTS:  *TYPICAL OF 6   COOLING TOWER  N/A:  OK: X REPLACE:  SIZE:  COMMENTS:  CHILLER INSUL.  N/A: OK: MISSING:  ESTIMATED QUANTITY:  CHIW PIPE INSUL.  N/A:  OK: MISSING:  CHIW PUMP MOTOR  N/A:  OK: X REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHIW PUMP MOTOR  N/A:  OK: REPLACE:  SIZE:  CHI	•		-			
COMP. MOTOR   NIA:			e Cooling Tov		• •	Tower
COMP. MOTOR					<del>-</del>	
COMP. MOTOR  N/A: X OK: REPLACE: SIZE:  COMP. MOTOR  N/A: X OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: X REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: X REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: X REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: X REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: X REPLACE: SIZE:  COMMENTS:  *TYPICAL OF 6   COOLING TOWER  N/A: OK: X REPLACE: SIZE:  COMMENTS:  COOLING TOWER  N/A: X OK: REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: MISSING: X ESTIMATED QUANTITY:  CHW PIPE INSUL.  CHW PUMP MOTOR  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REP		II		1	l l	
COMP. MOTOR		11		1		
CT/ACCU FAN MTR  N/A:  OK: X  REPLACE:  SIZE:  CT/ACCU FAN MTR  N/A:  OK: X  REPLACE:  SIZE:  CT/ACCU FAN MTR  N/A:  OK: X  REPLACE:  SIZE:  CT/ACCU FAN MTR  N/A:  OK: X  REPLACE:  SIZE:  COMMENTS:  *TYPICAL OF 6   COOLING TOWER  N/A:  OK: X  REPLACE:  SIZE:  AIR COOLED COND.  N/A: X  OK:  REPLACE:  SIZE:  COMMENTS:  CHILLER INSUL.  N/A: X  OK:  MISSING:  ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A:  OK:  MISSING:  COMMENTS:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:	IF					
CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X* REPLACE: SIZE: COMMENTS: *TYPICAL OF 6  COOLING TOWER N/A: OK: X REPLACE: SIZE: COMMENTS:  *TYPICAL OF 6  COOLING TOWER N/A: OK: X REPLACE: SIZE: COMMENTS:  COMMENTS:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: MISSING: COMMENTS:  CHILLER INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY: SIZE: COMMENTS:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: SIZE: CHW PUMP MOTOR N/A: OK: SIZE: SIZE: CHW PUMP MOTOR N/A: OK: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZ						
COMMENTS: *TYPICAL OF 6  COMMENTS: *TYPICAL OF 6  COOLING TOWER   N/A:   OK: X   REPLACE:   SIZE:    AIR COOLED COND.   N/A: X   OK:   REPLACE:   SIZE:    COMMENTS:   SIZE:   SIZE:    COMMENTS:   SIZE:   SIZE:    COMMENTS:   CHILLER INSUL.   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:    CHILLER INSUL.   N/A:   OK:   MISSING: X   ESTIMATED QUANTITY:   35' @ 6"    COMMENTS:   CHW PIPE INSUL.   N/A:   OK:   MISSING: X   ESTIMATED QUANTITY:   35' @ 6"    COMMENTS:   SIZE:   CHW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:    CHW PUMP SEALS	IL			1		
COMMENTS: *TYPICAL OF 6  COOLING TOWER   N/A:   OK: X   REPLACE:   SIZE:   AIR COOLED COND.   N/A: X   OK:   REPLACE:   SIZE:   COMMENTS:  CHILLER INSUL.   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   MISSING: X   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   MISSING: X   ESTIMATED QUANTITY:   COMMENTS:  CHW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:				_ 1		
COOLING TOWER   N/A:   OK:   X   REPLACE:   SIZE:   AIR COOLED COND.   N/A:   X   OK:   REPLACE:   SIZE:   COMMENTS:  CHILLER INSUL.   N/A:   X   OK:   MISSING:   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   MISSING:   X   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   MISSING:   X   ESTIMATED QUANTITY:   COMMENTS:  CHW PUMP MOTOR   N/A:   OK:   X   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   X   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:	CT/ACCU FAN MTR			REPLACE:	SIZE:	
AIR COOLED COND.  N/A: X OK: REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: MISSING: X ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:	COMMENTS:	*TYPICAL	OF 6			
AIR COOLED COND.  N/A: X OK: REPLACE: SIZE:  COMMENTS:  CHILLER INSUL.  N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: MISSING: X ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:	COOLING TOWER	N/A:	IOK: X	REPLACE:	SIZE:	
COMMENTS:  CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 35' @ 6'  COMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:						
CHILLER INSUL.   N/A: X   OK:   MISSING:   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   MISSING: X   ESTIMATED QUANTITY:   35' @ 6'   COMMENTS:   SIZE:   CHW PUMP MOTOR   N/A:   OK: X   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK: X   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:			10	1,72, 2,102.		
CHW PIPE INSUL.  N/A:  OK: MISSING: X ESTIMATED QUANTITY: 35' @ 6"  COMMENTS:  CHW PUMP MOTOR  N/A:  OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:	OOMMENTO.					
CHW PIPE INSUL.  N/A:  OK: MISSING: X ESTIMATED QUANTITY: 35' @ 6"  COMMENTS:  CHW PUMP MOTOR  N/A:  OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE: SIZE:	CHILLER INSUI	IN/A· X	IOK.	MISSING:	IESTIMATED QUANTITY:	
CHW PUMP MOTOR				i		35' ⋒ 6"
CHW PUMP SEALS         N/A:         OK: X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	COMMENTS:				,	
CHW PUMP SEALS         N/A:         OK: X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:						
CHW PUMP SEALS         N/A:         OK: X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:						
CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP SEALS	N/A:	ок: х	REPLACE:	SIZE:	
CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:	
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:	CHW PUMP SEALS		1		•	
CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PUMP MOTOR	N/A:				
COMMENTS:	CHW PUMP SEALS		ок:		l l	
GUNINEN 18.	COMMENTS:			<del> </del>		
	COMMENTS:					
	CONTINIEN 15:			·		
	COMMEN 15:					
	COMMENTS:					
	COMMENTS:					
	COMMENTS:					
	COMMENTS:					
	COMMENTS:					
	COMMENTS:					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7810

FILE:

	BOIL	ER & CON	VERTER - HV	AC UPGRA	DE OBSERV	/ATIONS
BOILER/CONVERTER NO	).	BLR-1&2	LOCATION (RM	) MER		
BOILER TYPE:	(1)=HW,	(2)=STM		AGE, OSAGE	MODEL:	3-5-508, 3-5-265
CONVERTER TYPE:			MFG.:		MODEL:	
STM - Steam		- Steam to Hot			•	p HW to Steam Convertor
HW - Hot Water			. HW to HW Cv.		Domestic Hot Wa	
BOILER BURNER	ATMOSF		POWER: X	l		REPLACE:
COMMENTS:			EIR SEALS, LEAKII			
			BOVE PUMP #6 Co	DRRODED		
	OTHER '	VALVES OK.			·	
BLR PUMP MOTOR	N/A:	lok:	TREPLACE:	SIZE:		
BLR PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:			AS AN ALARM SOL			
COMMENTS.	I INC AL	JUNET WATER	TO AIT ALAININ SOC	7.1DII10		
			1			7.700
BLR INSULATION	N/A:	OK:	MISSING:	ESTIM	ATED QUANTITY	<b>Y</b> :
PIPE INSULATION	N/A:	OK:	MISSING:	ESTIM	ATED QUANTITY	<b>/</b> :
COMMENTS:	ALL PUN	IPS UNINSULA	TED. BOILERS O	K		
	<b>***</b>					
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:						
***						
OV PUMP MOTOR	Thurs	TO1/	TDED! ACE.	low		
CV PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
CV PUMP SEALS	N/A:	JON:	REPLACE:	SIZE:		
COMMENTS:						
CV INSULATION	N/A:	IOK:	MISSING:	IESTIM	ATED QUANTIT	γ.
CV PIPE INSUL.	N/A:	IOK:	MISSING:	1	ATED QUANTIT	
	IN/A.	Jor.	IMIOSING.	LEGITIM	ATED GOVIALIL	1.
COMMENTS:						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/CWW

**BUILDING DATA SURVEY OBSERVATIONS** 

BLDG NUMBER: 7814

**BLDG NAME: ENL BARRACKS W/O DIN** 

SAT:

0

ELECTRIC METER: N

CONDITIONED SQFT:

WED:

THUR:

41,843

GAS METER: Y SUSPECT ACM: N

**BUILDING OCCUPANCY SCHEDULE** 

BUILDING SCHDULE NO:

PRES START:

PRES STOP:

REQ START:

REQ STOP:

10

SUN: MON: 0 0 24 24 0

24

0 0 24 24 0 0 0 24 24 24

TUE:

0 0 24 24 0 0

24 0 24 24 24

FRI:

**REMARKS:** 

ACM abatement has been completed.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/CWW

	7 (11 ( 1	17 (1 <b>1</b> D		011	00	111		<u> </u>	,,,,,,	<u> </u>		
	NG NUMBE					A11111	OCATIO	V. MEE	NODTU			_
A	HU NUMBE	R: AHL	)-` <u> </u>			AHU L	OCATIO	N: WEF	NORTH			_
REFRIG SYS	# SRVNG #	HU: CH	<del>1</del> -1		_		S AREA:	HALLV	VAYS			
				% (	OF BLDG	AREA H	IEATED:				5	
AHU UNIT T	YPE SING	SLE ZONE					N	UMBER	OF ZONE	ES IF MZ	UNIT:	0
	CFM-HTG			3,500		C	FM-CLG:			3,500		
	MIN %OA			100			X %OA:			100		
NAMEPLA [.]	TE											
	UNIT MFG	: AIRTH	ERM				UN	IIT MODI	EL: L08	15		
SUPPI	Y FAN HP	:		1			RET/EX	H FAN H	łP:		0	
SUPPLY FAN	MTR MFG	: CENT	JRY			RET/I	EXH FAN	MTR ME	:G:			
SUPPLY FAN M	TR MODEL	: 8-33-1	260-03			RET/EXI	FAN M	TR MODE	EL:			
С	OMMENTS	:								- 4 / I Total S allering and in a second control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of		
COILS												
C	oil		Coil Typ	е		Mo	dulating	Valve?				
PREI	HEAT COIL	: NONE										
HEA	TING COIL	: DUAL	TEMP. V	VATER								
RE	HEAT COIL	: NONE										
н	UMIDIFIER	: NONE										
coo	LING COIL	: CW										
SCHEDULI	=											
DAY SCHED		10						MON	TH SCHE	DULE NO	U:	<u>3</u>
	SUN:	MON:	TUE	: WE	D: TH	UR:	FRI:	SAT:				
PRES START:	0	0		)	0	0	0	0				
PRES STOP:	24	24	24		24	24	24	24				
REQ START:		0		)	0	0	0	0				
REQ STOP:	24	24	24	<u> </u>	24	24	24	24				
MONTHS JAN	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$		$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTROL												
TYI	PE OF CON	TROLS:	PNEUN	MATIC			THERM	MOSTAT	TYPE:	OTHER		
PRESENT	TEMP WINT	R OCC:			0			DECK				0
PRESENT TE					0			DECK I				<u>o</u> :
PRESEN	T TEMP SL	IM OCC			0	ОТНЕ	R SETPO			[		Ĭ
PRESENT T					0		HER SET					0
MIN OA DMP	R CONTRO	L: N	MI	XED AI	R DMPR	CONTRO	L: N	IMPLE	MENT D	EMAND	LIMIT CN	TRLS? N
MAX OA DMP		=				CONTRO	_				TIME C	
RET AIR DMP		===				CONTRO			TIME	CLOCK C	OPERATION	-
EXH AIR DMP		=										
OTHER C	ONTROLS	DESCR:										
		MENTS.						·····				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

NTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: JM/AJN/CWW

7 (11 ( 1 12	ANDENIO CITI O	JICTEL OBCENTIONS	
BUILDING NUMBER		AHU LOCATION: MER SOUTH	
REFRIG SYS # SRVNG AI	HU: CH-2	SERVES AREA: HALLWAYS	
REFRIGOR WORK		G AREA HEATED:	5
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZONES IF MZ	JNIT: 0
CFM-HTG:	3,500	<b>CFM-CLG</b> : 3,500	
MIN %OA:	100	MAX %OA: 100	
NAMEPLATE			
UNIT MFG:	AIRTHERM	UNIT MODEL: L0815	
SUPPLY FAN HP:	1	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	8-331260-03	RET/EXH FAN MTR MODEL:	
COMMENTS:			:
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
	DUAL TEMP WATER		
REHEAT COIL:			
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	10	MONTH SCHEDULE NO	): 3
SCHEDULE COMMENTS:			Name and American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American American Ame
SUN:	MON: TUE: WED: TH	HUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	0 0 0	0 0 0	
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV:	DEC:
ON:			$\boxtimes$
CONTROLS			
TYPE OF CON	TROLS: PNEUMATIC	THERMOSTAT TYPE: OTHER HOT DECK DEG F:	0
PRESENT TEMP WINT	R OCC: 0	COLD DECK DEG F:	0
PRESENT TEMP WINTR L	JNOCC: 0	MIXED AIR DEG F:	<b>0</b> !
PRESENT TEMP SU	M OCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM L		OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTRO	L: N MIXED AIR DMPF	R CONTROL: N IMPLEMENT DEMAND	
MAX OA DMPR CONTRO	L: Y ECONOMIZER DE	B CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTRO	L: N ECONOMIZER WE	B CONTROL: N TIME CLOCK (	PERATIONAL? N
EXH AIR DMPR CONTRO	L: N		
OTHER CONTROLS I			
CONTROLS COM	MEN 19:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/CWW

BUIL	DING NUMBE. AHU NUMBE				# 10.00 F	AHU L	OCATIO	N: THE	OUGHO	UT BLDG	<u> </u>	none or many	
REFRIG S	YS#SRVNG	AHU: CI	H-1		_	SERVE	S AREA:	: ALL				-	
				%	OF BLDG	AREA H	IEATED:	<u> </u>			70	<u>0</u>	
AHU UNI	TYPE FAN	COILS - :	2 PIPE				N	UMBER	OF ZONI	ES IF MZ	UNIT:	0	
	CFM-HTG		4	1,400			FM-CLG:		4	1,400	·		
	MIN %OA	:		0		M.A	XX %OA:	:		0			
NAMEPL	ATE												
	UNIT MFG	•					UN	NIT MOD	EL:				
SU	PPLY FAN HP	:		7.5			RET/E	KH FAN I	HP:		0		
SUPPLY F	AN MTR MFG	:				RET/	EXH FAN	MTR M	FG:				
SUPPLY FAN	MTR MODEL	•				RET/EXI	I FAN M	TR MOD	EL:				
	COMMENTS	:											
COILS													
	Coil		Coil Type	е		Mo	dulating	y Valve?					
Pł	REHEAT COIL	: NONE				_ 🗆							
	EATING COIL		TEMP W	ATER									
F	REHEAT COIL												
6	HUMIDIFIER					님							
C	OOLING COIL	: CW				⊔							
SCHEDU	LE												
DAY SCI	IEDULE NO:	10						MON	TH SCHE	DULE N	0:	3	
SCHEDULE (	COMMENTS:												
	SUN:	MON:	TUE:	WE	ED: TH	UR:	FRI:	SAT:					
PRES STAF	RT: 0	0	0		0	0	0	0					
PRES STO	OP: 24	24	24		24	24	24	24					
REQ STAF	RT: 0	0	0		0	0 .	0	0					
REQ STO	)P: 24	24	24		24	24	24	24					
MONTHS JA	N: FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:		
ON:	<b>3 2</b>	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$			$\boxtimes$	$\square$	$\boxtimes$	!	
CONTRO	L3			-									
1	TYPE OF CON	TROLS:	ELECTF	RIC				MOSTAT					
PRESEN	T TEMP WINT	R OCC:			0			DECK I				0	
PRESENT 1	EMP WINTR	JNOCC:	Ĺ		0			ED AIR I				0	
PRES	ENT TEMP SU	M OCC:			0	OTHE		DINT DE					
PRESEN'	TEMP SUM (	JNOCC:			0	ОТІ	HER SET	POINT D	EG F:			0	
MIN OA DI	MPR CONTRO	L: N	MIX	ED AII	R DMPR	CONTRO	L: N	IMPI F	EMENTO	EMAND	LIMIT C	NTRI S2	N
	MPR CONTRO	===				CONTRO						CLOCK:	N
RET AIR DI	MPR CONTRO	L: N				CONTRO			TIME	CLOCK (			N
	MPR CONTRO							•				•	
OTHER	CONTROLS	DESCR:											
	TROLS COM						······································						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: JM/AJN/CWW

BUILDING NUMBER: 7814	BOILER RM LOCATION: MER
BOILER UNIT	
	IVERTER SERVES AREA OR SERVICE: ALL
SOURCE OF BLDG HEAT	
● ⊠ BOILER	CONVERTER
BOILER TAG: BLR-1	CONVERTER TAG:
BOILER TYPE: HW (UP TO 250 DEG)	CONVERTER TYPE:
FUEL TYPE: NAT. GAS	CONV HT SOURCE:
CENTRAL PLANT DIRECT	
IAMEPLATE	% AREA HEATED BY BB RADIATION: 20
BOILER MFG: KEWANEE	BLR CAP OUTPUT (BTUH): 2,350,000
UNIT MODEL: M-235-KX	BLR CAP INPUT (BTUH): 2,938,000
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 10	MONTH SECHDULE NO: 1
SUN: MON: TUE:	WED: THUR: FRI: SAT:
PRES START: 0 0 0 0	0 0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 0 0	0 0 0
REQ STOP: 24 24 24	24 24 24
MONTHS JAN: FEB: MAR: APR: I	MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF BLR CONTROLS: PNEUM/	ATIC RESET CONTROLS: Y
OPERATING SETPOINT:	0 DEG F or PSIG
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: JM/AJN/CWW

BUILDING N	UMBER:	7814				BOILER	RM LOCA	ATION:	MER		
<b>BOILER U</b>	NIT										
SOURCE OF	BLDG HE	AT —	BLR/CO	NVERTER	SERVES A	REA OR S	ERVICE:	DHW			
● N BOIL	.ER				П	CONVERT	ER				
		BLR-2				ONVERTE	_				
BOILE	R TYPE:	MED PRESS	S STEAM (1	5# TO 125#)	co	NVERTER	TYPE:				
FUE	L TYPE:	NAT. GAS			co	NV HT SO	URCE:				_ :
CENTRA	L PLANT I	DIRECT									:
NAMEPLA	TE				% AREA I	HEATED B	Y BB RAI	DIATION			0
BOILER MFG:					BLR	CAP OUT	PUT (BTU	н):		1,939,200	
UNIT MODEL:	60-15				Bl	R CAP IN	PUT (BTU	H):		2,424,000	
COMMENTS:											
SCHEDUL	· =										
SCHEDGE	<u> </u>										
DAYS SCHEDI		10					MONTH	SECHE	OULE NO:		3
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START			0	0	0	0	0				
PRES STOP		24	24	24	24	24	24				
REQ START	-	24	24	0	<u>0</u>	24	0 24				
NEQ 310F	24			24			24				_!
MONTHS JAN	l: FEB:	MAR:	APR:	MAY: J	IUN: JUI	.: AUG:	SEP:	OCT:	NOV:	DEC:	<del>-</del> .
ON:		$\boxtimes$						$\boxtimes$	$\boxtimes$	$\boxtimes$	-
CONTROL	S										
	F BLR CO RATING SE IRNER CO	ETPOINT:	ELECTF		EG F or PSI	G	RESE	T CONTI	ROLS: [	N	
CONT	ROLS CO	MMENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO**: 1406-001 **DATE**: 10/10/94

PREPARED BY: JM/AJN/CWW

BOILER MFG: BLR CAP OUTPUT (BTUH): BLR CAP INPUT (BTUH): COMMENTS:	
BLR/CONVERTER SERVES AREA OR SERVICE: ALL  BOILER BOILER TAG: CONVERTER TAG: CONVERTER TYPE: FUEL TYPE: CONVERTER TYPE: CONVERTER TYPE: CONVERTER TYPE: FUEL TYPE: CONVERTER TYPE: CONVERTER TYPE: FUEL TYPE:  CENTRAL PLANT DIRECT  MAMEPLATE  BOILER MFG: UNIT MODEL: BLR CAP OUTPUT (BTUH): COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: SCHEDULE COMMENTS:  PRES START:  SUN: MON: FUE: WED: THUR: FRI: SAT: PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	
SOURCE OF BLDG HEAT  BOILER BOILER TAG: BOILER TYPE: FUEL TYPE: CONVERTER TAG: CONVERTER TYPE: FUEL TYPE: CONVERTER TYPE: FUEL TYPE: CONVERTER TYPE: FUEL TYPE: CONV HT SOURCE:  CENTRAL PLANT DIRECT  WAREA HEATED BY BB RADIATION:  BUR CAP OUTPUT (BTUH): UNIT MODEL: COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: SCHEDULE COMMENTS:  SUN: BUR CAP INPUT (BTUH):  WONTH SECHDULE NO: SCHEDULE COMMENTS:  SUN: PRES START:  O O O O O O O O O O O O O O O O O O	
BOILER TAG: BOILER TYPE: FUEL TYPE: CONVERTER TYPE: FUEL TYPE: CONV HT SOURCE:  CENTRAL PLANT DIRECT  WAREA HEATED BY BB RADIATION:  BOILER MFG: UNIT MODEL: COMMENTS:  BLR CAP OUTPUT (BTUH): BLR CAP INPUT (BTUH): COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: O O O O O O O O O O O O O O O O O O O	
BOILER TAG: BOILER TYPE: FUEL TYPE: CONVERTER TYPE: FUEL TYPE: CONV HT SOURCE:  CENTRAL PLANT DIRECT  WAREA HEATED BY BB RADIATION:  BOILER MFG: UNIT MODEL: COMMENTS:  BLR CAP OUTPUT (BTUH): BLR CAP INPUT (BTUH): COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: O O O O O O O O O O O O O O O O O O O	
BOILER TYPE:	<del></del> ·
FUEL TYPE: CONV HT SOURCE:  CENTRAL PLANT DIRECT  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  **NAMEPLATE**  *	
CENTRAL PLANT DIRECT	
MAMEPLATE	
NAMEPLATE	
BOILER MFG:	
BOILER MFG:	
UNIT MODEL: BLR CAP INPUT (BTUH):  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 MONTH SECHDULE NO:  SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT:  PRES START: 0 0 0 0 0 0 0 0 0  PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	
UNIT MODEL: BLR CAP INPUT (BTUH):  COMMENTS:  SCHEDULE  DAYS SCHEDULE NO: 10 MONTH SECHDULE NO:  SCHEDULE COMMENTS:  SUN: MON: TUE: WED: THUR: FRI: SAT:  PRES START: 0 0 0 0 0 0 0 0 0  PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	
COMMENTS:    SCHEDULE NO:   10	<del></del>
DAYS SCHEDULE NO:   10	
DAYS SCHEDULE NO:           SCHEDULE COMMENTS:             SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	
DAYS SCHEDULE NO:           SCHEDULE COMMENTS:             SUN: MON: TUE: WED: THUR: FRI: SAT:           PRES START: 0 0 0 0 0 0 0 0 0 0           PRES STOP: 24 24 24 24 24 24 24 24           REQ START: 0 0 0 0 0 0 0 0 0 0           REQ STOP: 24 24 24 24 24 24 24 24           MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	_
SUN:   MON:   TUE:   WED:   THUR:   FRI:   SAT:	
SUN:   MON:   TUE:   WED:   THUR:   FRI:   SAT:	3
PRES START:       0       0       0       0       0       0       0         PRES STOP:       24       24       24       24       24       24       24       24         REQ START:       0       0       0       0       0       0       0       0         REQ STOP:       24       24       24       24       24       24       24       24         MONTHS       JAN:       FEB:       MAR:       APR:       MAY:       JUN:       JUL:       AUG:       SEP:       OCT:       NOV:       DEC:	
PRES STOP:       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24       24	
REQ START:       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0	
REQ STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	
ON:	
ON:	
CONTROLS	
TYPE OF BLR CONTROLS: ELECTRIC RESET CONTROLS: N	
OPERATING SETPOINT: DEG F or PSIG	
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	
HW PUMP	
PUMP TAG: DTWP-1 PUMP HP: 2 PUMP MFG: CENTURY	
PUMP SERVICE: DUAL TEMP PUMP PUMP PUMP MODEL: 5C-184-KMA	:
HW PUMP	
PUMP TAG: DTWP-2 PUMP HP: 2 PUMP MFG: CENTURY	
PUMP SERVICE: DUAL TEMP PUMP  PUMP MODEL: 5C-184-KMA	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: JM/AJN/CWW

HW PUMP					
PUMP TAG:	DTWP-3	PUMP HP:	2	PUMP MFG:	CENTURY
PUMP SERVICE:	DUAL TEMP PUMP			PUMP MODEL:	
HW PUMP					
PUMP TAG:	DTWP-4	PUMP HP:	3	PUMP MFG:	CENTURY
PUMP SERVICE:	DUAL TEMP PUMP			PUMP MODEL:	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO:** 1406-001 **DATE:** 10/10/94

PREPARED BY: JM/AJN/CWW

# PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MRED.	7814				BLDG	NAME:	FNI BAF	RACKS	W/O DIN			
			RAD-	1						VESTIBU	IES TO	II FTS	
	-	/ TAG) NO:	Maria Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the							VESTIBO	LL3, 10	ILLIO	
SO	URCE OF	HEATING:	BLR-	7		<del></del>	3	SERVES	AKEA:				
RAD	IATION	JNIT TYPE:	HW					% AREA	A HTG:		2	20	
RADIA	TION	PUMP									. '		
PUMP '	TAG: 1			PUM	IP HP:	0	.75	PUMF	MFG:	RELIANC	E		
								PUMP M	ODEL:	442775-G	T		
SCHEE	ULE												
DA	YS SCH	EDULE NO:		10	- ) -	MC	NTHS S	CHEDULI	E NO:		1		
SCHE	DULE C	OMMENTS:											
		SUN:	MON:	TUE:	: WE	D: T	HUR:	FRI:	SAT:				
PRES S	TART:	0	0.		)	0	0	0	0				
PRES	STOP:	24	24	24		24	24	24	24				
REQ S	TART:	0	0	0	)	0	0	0	0				
REQ	STOP:	24	24	24	<u></u>	24	24	24	24				
MONTHS	JAN:	FEB: M	IAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP	: OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$						$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTE	ROLS												
TY	PE OF R	AD. CONTR	ROLS:										
	RADIA	TION CONT	ROL:	NONE									
	oc	C HT SPAC	E SP:		0								
	_	C HT SPAC			0			F	RESET	CONTROL:	N		
	CONTR	OL COMME	ENTS:	3 WAY	PNEUN	MATIC (	CONTRO	L VALVE	IN MER				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO:** 1406-001 **DATE:** 10/10/94

PREPARED BY: JM/AJN/CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

		BLDG NAME: ENL BARRACKS W/O	NID C
REF. UNIT NUMBER/TAG:	CH-1	LOCATION (N	MER#): MER
		AHU'S SEI	
UNIT	TYPE RECIPROCA	TING WITH AIR COOLED CONDENSIN	IG UNIT
NAMEPLATE			
CHILLER MFG:	TSI	TOWER MFG:	BOHN
CHILLER MODEL:	SC2CD70	# OF TOWER FANS:	4
CHILLER SERIAL NO:	9836-1	TOWER FAN V:	208
CHILLER V:	20	8 TOWER FAN AMPS:	7.2
CHILLER AMPS:	30	0 TOWER FAN HP:	1.5
CHILLER PH:		0	
CHILLER CAP (TONS):	7	<u>'0</u>	
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE SCHEDULE COMMEN		MONTHS SCHEDU	LE NO: 2
SUN:		WED: THUR: FRI: SAT:	
PRES START: 0 PRES STOP: 24		$\frac{0}{24} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	
PRES STOP: 24 REQ START: 0		$\frac{24}{0} = \frac{24}{0} = \frac{24}{0} = \frac{24}{0}$	
REQ STOP: 24		$\frac{0}{24}$ $\frac{0}{24}$ $\frac{0}{24}$ $\frac{0}{24}$ $\frac{0}{24}$	
MONTHS JAN: FEB:	MAR: APR: N	MAY: JUN: JUL: AUG: SEP:	OCT: NOV: DEC:
			*
ON:			
ON:			
	<u> </u>		
CONTROLS  TYPE OF CONTR	OLS: ELECTRIC		
CONTROLS  TYPE OF CONTR  CWS SETP	OLS: ELECTRIC	0 CNWS SETPOINT	: 0
CONTROLS  TYPE OF CONTR  CWS SETP	OLS: ELECTRIC OINT: OINT:	0 CNWS SETPOINT 0 CNWR SETPOINT	: <u>0</u> : <u>0</u>
CONTROLS  TYPE OF CONTR  CWS SETP CWR SETP PRESS LIT	OLS: ELECTRIC  OINT: OINT: TE HI: N	0 CNWS SETPOINT 0 CNWR SETPOINT TEMP LITE HI: N OTHER INI	: 0
CONTROLS  TYPE OF CONTR  CWS SETP- CWR SETP- PRESS LITE PRESS LITE	OLS: ELECTRIC  OINT: OINT: TE HI: N  LOW: N TE	0 CNWS SETPOINT 0 CNWR SETPOINT TEMP LITE HI: N OTHER INI EMP LITE LOW: N	: <u>0</u> : <u>0</u>
TYPE OF CONTR  CWS SETP CWR SETP PRESS LITE PRESS GAU	OLS: ELECTRIC  OINT: OINT:  TE HI: N  LOW: N TE  JGES: N T	0 CNWS SETPOINT 0 CNWR SETPOINT TEMP LITE HI: N OTHER INI	: <u>0</u> : <u>0</u>
TYPE OF CONTR  CWS SETP CWR SETP PRESS LITE PRESS GAU CONTROLS CON	OLS: ELECTRIC  OINT: OINT:  TE HI: N  LOW: N TE  JGES: N T	0 CNWS SETPOINT 0 CNWR SETPOINT TEMP LITE HI: N OTHER INI EMP LITE LOW: N	: 0
TYPE OF CONTR  CWS SETP CWR SETP PRESS LITE PRESS GAU	OLS: ELECTRIC  OINT: OINT:  TE HI: N  LOW: N TE  JGES: N T	0 CNWS SETPOINT 0 CNWR SETPOINT TEMP LITE HI: N OTHER INI EMP LITE LOW: N	: 0
TYPE OF CONTR  CWS SETP CWR SETP PRESS LITE PRESS GAU CONTROLS CON	OLS: ELECTRIC  OINT: OINT:  TE HI: N  LOW: N TE  JGES: N T  MMENTS:   JMPS  PUMP HP:	0 CNWS SETPOINT 0 CNWR SETPOINT TEMP LITE HI: N OTHER INI EMP LITE LOW: N EMP GAUGES: N	: 0 : 0

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7814

FILE:

AHU NO.:	AHU-1	LOCATION	G UNIT - HVAC	LOOR (NORTH)				
AHU TYPE:	SZ	MFG.:	TRANE	Lock(Horkin)	MODEL:	L10		
SZ - Single Zone		iting & Vntltng		an Coil (Indicate 2	1		<i>i</i> )	
MZ - Mulitzone		able Air Vol.	i i	Reheat System	. 101 <b>L</b> 1 100 01		-1	
DD - Dual Duct	UH - Unit I			Induction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	*
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
			ECTED FROM ACTUA		BITTO			
COMMENTS:	LINKAGE	15 DISCONN	ECTED FROM ACTO	ATOR			DPR-ACT = Dampe	
	######################################						RP-ACT = Replace	ACIDATO
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
	IIV/A:	JUN: X	INEFLACE.	JOIZE.				
COMMENTS:								
OLIDDI VAID SAN		IDED! ACE	EAN DEADINGS.	ICOUNTS!	TC.			
SUPPLY AIR FAN	OK: X		FAN BEARINGS:	COMMEN				
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	18:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN		N/A		
RETURN FAN MOTOR	OK:	REPLACE	:	COMMEN	TS:	N/A		
COMMENTS:								
		W	- M. V.S					
		1017 17	REPLACE:	SIZE:	CNTLVLV	NONE	RP- ACT:	RP-BD:
COOLING COIL	N/A:	OK: X			CNITEMEN	ок:	RP- ACT:	RP-BD:
	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	II ~		
HEATING COIL				SIZE: SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL	N/A: X	ок:	REPLACE:				RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:		RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP-ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION DUCT INSULATION	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
PREHEAT COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP-ACT:	RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7814

FILE:

AHU NO.:	AHU-2	LOCATIO	IG UNIT - HVAC	LOOR (SOUTH)	COCLIVA	110110		
AHU TYPE:	SZ	MFG.:	)N (RIII) 151 F	LOOK (SOUTH)	MODEL:			
SZ - Single Zone		ating & Vntltn	a :EC E	an Coil (Indicate		AD for A Die	\	
MZ - Mulitzone		iable Air Vol.	•	Reheat System	2P for 2 Pipe of	4P 10r 4 PIP	e)	
DD - Dual Duct	UH - Unit			nduction System				
O.A. DAMPER	<u> </u>			<u>·</u>		Tork	IDD ACT	
	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	SAME AS	AHU-1 EXC	EPT LINKAGE IS CONN	IECTED TO ACT	TUATOR		DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	e Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:	<del></del>			
COMMENTS:			*					
			· · · · · · · · · · · · · · · · · · ·			·		
SUPPLY AIR FAN	OK:	REPLACI	E FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK:	REPLACI		COMMEN				
INLET VANES	N/A:	OK:	COMMENTS:	100111112			•.	
RETURN AIR FAN	OK:		E FAN BEARINGS:	COMMEN	JTC:			
RETURN FAN MOTOR	OK:	REPLACI		COMMEN				
COMMENTS:	JON.	INLFLACI	ne 1	COMME	VI 5.			
COMMENTS:								
COOLING COIL	III.	Tov	IDEDI AGE	Total	ONTING	Tou	100 407	Tee 55
	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:			· · · · · · · · · · · · · · · · · · ·	······································			RP-ACT = Replace	Actuator
							RP-BD = Replace	Body
****								
AHU PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:				_
COMMENTS:								
								***************************************
PIPE INSULATION	N/A:	OK:	MISSING:	ESTIMAT	ED QUANTITY:			***************************************
DUCT INSULATION	N/A:	IOK:	MISSING:		ED QUANTITY:			
COMMENTS:	10// 1.	IOI.	IMIOGING.	1 LOT INVAT	LU GUANTITI.			
COMMENTS.		B.AMP.						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7814

FILE:

HILLER / EQUIP. NO.		CH-1	LOCATION (RM)	MER				
EFG. EQUIP. TYPE:		R-ACCU	MFG.: TSI		MODEL:	SC2CD70		
C-WCT = Centrifugal w/	Water Side Co	oling Tower	R-A	CCU = Reciprocation	ng w/ Air Coole	d Condensing	Unit	
R-WCT = Reciprocating			er ASE	-WCT = Absorption	n w/ Water Side	Cooling Towe	er	
ACCU = Air Cooled Cond		Ţ.		Cooling Tower				
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:				
COMP. MOTOR	N/A: X	ок: х	REPLACE:	SIZE:				.,,
COMP. MOTOR	N/A: X	ОК:	REPLACE:	SIZE:				
COMP. MOTOR	N/A: X	OK: X	REPLACE:	SIZE:		OK: X		
CT/ACCU FAN MTR	N/A: X	OK: X	REPLACE:	SIZE:				
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:				
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	TYPICAL (	OF 6 FANS		
COMMENTS:								
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:				
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:		···		
COMMENTS:		<u></u>						
CHILLER INSUL.	IN/A:	OK: X	MISSING:	[ESTIMAT	ED QUANTITY	ſ:		
CHILLER INSUL. CHW PIPE INSUL. COMMENTS:	N/A: N/A:	OK: X	MISSING: MISSING:		ED QUANTITY			
CHW PIPE INSUL.	N/A:							
CHW PIPE INSUL. COMMENTS:		OK: X	MISSING:	ESTIMAT				
CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR	N/A:	OK: X	MISSING:	ESTIMAT				
CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A:	OK: X OK: X OK: X	MISSING:  REPLACE:  REPLACE:	SIZE:				
CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A: X	OK: X OK: X OK: X	MISSING:  REPLACE:  REPLACE:  REPLACE:	SIZE: SIZE: SIZE:				
CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:				
CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR	N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: X OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 8 Nov-94 CWW

CHECKED BY:

AJN

BLDG:

7814

FILE: 7814.XLS

			VERTER - I			F ORSEK	VATIONS	
BOILER/CONVERTER NO		BLR-1,2	LOCATION (		MER			
BOILER TYPE:	1-HW, 2-S	TM		OSAGE, O	SAGE	MODEL:	3-5-508, 3-5-26	5
CONVERTER TYPE:			MFG.:			MODEL:		
STM - Steam			Water Conv.				p HW to Steam Co	onvertor
HW - Hot Water			. HW to HW Cv.			omestic Hot W		
BOILER BURNER	ATMOSPH	HERIC:	POWER:	X	OK:		REPLACE:	
COMMENTS:			***************************************					
		WF-\$40.00						
DI D DUMB MOTOR	76.1/4. 3/	Jor.	IDEDI AGE		Tours			
BLR PUMP MOTOR BLR PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:		SIZE:	<del></del>		
		OK:	REPLACE:		SIZE:			
COMMENTS:	PUMP #1		205410		***************************************			
	PUMP#31	NEEDS PUM	SEALS		******			
BLR INSULATION	N/A:	OK: X	MISSING:		TECTIMA	TED QUANTIT	V·	
PIPE INSULATION	N/A:	OK: X	MISSING:			TED QUANTIT		
COMMENTS:		PS UNINSULA			TESTIMA	TED QUANTIT	Ι.	
COMMENTS.		SULATION I				· · · · · · · · · · · · · · · · · · ·		
	30 @ 3 11	NSOLATION	NEEDED					
HW PUMP MOTOR	N/A:	OK:	REPLACE:		ISIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			·
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			•
COMMENTS:								
		****						
CV PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CV PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
COMMENTS:								
OV/INOUE ATION	16.07	lov	I		1			
CV INSULATION	N/A:	OK:	MISSING:		<del></del>	TED QUANTIT		
CV PIPE INSUL.	N/A:	OK:	MISSING:		JESTIMA:	TED QUANTIT	Y:	
	DOMEOTI	0 1 HAL 0 0 1 1 1	DTCDC - OV					
COMMENTS:		C HW CONVE	ENSULATION					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

# **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NAME: ENL BARRACKS W/AS **BLDG NUMBER: 7050** 

ELECTRIC METER: N

CONDITIONED SQFT:

39,675

GAS METER: N SUSPECT ACM: Y

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 23

> FRI: MON: TUE: WED: THUR: SAT: SUN: PRES START: 0 0 0 0 0 24 24 24 24 24 24 24 PRES STOP: 5 5 5 5 6 6 5 REQ START: 24 24 24 24 24 24 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

7	
BUILDING NUMBER: 7050	
AHU NUMBER: AHU-1	AHU LOCATION: KITCHEN
REFRIG SYS # SRVNG AHU: CENTRAL PLANT  % OF BL	SERVES AREA: DINING HALL  LDG AREA HEATED: 6
AHU UNIT TYPE SINGLE ZONE	NUMBER OF ZONES IF MZ UNIT: 0
<b>CFM-HTG</b> : 7,330	CEN CLC: 7.220
MIN %OA: 7,330	CFM-CLG:       7,330         MAX %OA:       100
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP: 10	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: BALDOR	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 23	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED:	THUR: FRI: SAT:
PRES START: 0 0 0 0	0 0
PRES STOP: 24 24 24 24 24	24 24 24
REQ START: 6 5 5 5 REQ STOP: 24 24 24 24	$\frac{5}{24}$ $\frac{5}{24}$ $\frac{6}{24}$
NEW 310F. 24 24 24 24	24 24 24
MONTHS JAN: FEB: MAR: APR: MAY: JU ON:	N: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF CONTROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC: 57	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC: 0	COLD DECK DEG F: 0
PRESENT TEMP SUM OCC: 57	MIXED AIR DEG F: 0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC: 0	
MIN OA DMPR CONTROL: N MIXED AIR DM	IPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: Y ECONOMIZER	
RET AIR DMPR CONTROL: Y ECONOMIZER V	
EXH AIR DMPR CONTROL: N	<b>L</b>
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

EMC NO: 1406-001 **DATE:** 10/13/94

BUILDING NUMBE	<u> </u>	AHU LOCATION: THROUGHOUT	BLDC
			BLUG
REFRIG SYS # SRVNG	AHU: <u>CENTRAL PLANT</u> % OF BLD	SERVES AREA: BARRACKS OG AREA HEATED:	89
AHU UNIT TYPE FAN	COILS - 2 PIPE	NUMBER OF ZONES	IF MZ UNIT: 0
CFM-HTG	37,200	CFM-CLG: 37,2	
MIN %OA	.: 0	MAX %OA:	0
NAMEPLATE			
UNIT MFG	): ·	UNIT MODEL:	
SUPPLY FAN HP	7.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG	i:	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL		RET/EXH FAN MTR MODEL:	THE RESERVE OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF
COMMENTS	: TOTAL FOR 93 FAN COILS		<del> </del>
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL	.: NONE		
HEATING COIL	: DUAL TEMP WATER		
REHEAT COIL		<b>_</b>	
HUMIDIFIER		<b></b>	
COOLING COIL	: NONE	· ⊔	
SCHEDULE			
DAY SCHEDULE NO:	10	MONTH SCHEDU	ILE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: T	HUR: FRI: SAT:	,
PRES START: 0	0 0 0	0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	0 0 0	0 0 0	
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: N	IOV: DEC:
ON:			
CONTROLS			
TYPE OF CON	ITROLS: ELECTRIC	THERMOSTAT TYPE: SII	NGLE SETPOINT
PRESENT TEMP WINT	TR OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR	<u> </u>	COLD DECK DEG F:  MIXED AIR DEG F:	0
PRESENT TEMP SU		OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM	UNOCC: 0	OTHER SETPOINT DEG F:	
MIN OA DMPR CONTRO			IAND LIMIT CNTRLS? N
MAX OA DMPR CONTRO		<b>==</b>	TIME CLOCK: N
RET AIR DMPR CONTRO	DL: N ECONOMIZER WI	B CONTROL: N TIME CL	OCK OPERATIONAL? N
EVII 415 51155 551155	y FAT		
EXH AIR DMPR CONTRO	DL: N		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

7 (111 1 11 11 11 11 11 11 11 11 11 11 11	
BUILDING NUMBER: 7050  AHU NUMBER: HV-1	AHU LOCATION: MER
AND NOMBER. 11V-1	
REFRIG SYS # SRVNG AHU: N/A	SERVES AREA: KITCHEN
% OF BLD	DG AREA HEATED: 5
AHU UNIT TYPE HEATING AND VENTILATING	NUMBER OF ZONES IF MZ UNIT: 0
<b>CFM-HTG</b> : 2,400	CFM-CLG: 0
MIN %OA: 100	MAX %OA: 100
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP: 3	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	— Ä
HUMIDIFIER: NONE	<u> —</u>
COOLING COIL: NONE	—— <u> </u>
<del> </del>	
SCHEDULE	
DAY SCHEDULE NO: 23	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: T	THUR: FRI: SAT:
PRES START: 0 0 0 0	0 0 0
PRES STOP: 24 24 24 24	24 24 24
REQ START: 6 5 5 5	5 5 6
REQ STOP: 24 24 24 24	24 24 24
MONTHS JAN: FEB: MAR: APR: MAY: JUN ON:	: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF CONTROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC: 0	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC: 0	COLD DECK DEG F: 0
DDECENT TEMP CUM OCC.	MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC: 0 PRESENT TEMP SUM UNOCC: 0	OTHER SETPOINT DESCRIP:  OTHER SETPOINT DEG F:  0
MIN OA DMPR CONTROL: N MIXED AIR DMP	R CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: Y ECONOMIZER D	
RET AIR DMPR CONTROL: N ECONOMIZER W	
EXH AIR DMPR CONTROL: N	
OTHER CONTROL & RECOR.	
OTHER CONTROLS DESCR:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/13/94

PREPARED BY: AJN/CWW

BUILDING NUI	MBER: 7050		i	BOILER RM LOCA	TION: ME	R			
BOILER UN	IT								
SOURCE OF E	LDG HEAT -	BLR/CONVERT	ER SERVES ARE	A OR SERVICE:	SPACE HEA	AT			
	R TAG: BLR-1 TYPE: HW (UP	TO 250 DEG)	CON	NVERTER VERTER TAG: ERTER TYPE:					
	TYPE: NAT. GA		CONV	HT SOURCE:			 :		
CENTRAL	PLANT DIRECT	,							
NAMEPLAT	E		% AREA HE	ATED BY BB RAD	IATION:		8		
BOILER MFG: K		:	BLR CAP OUTPUT (BTUH):         1,749,000           BLR CAP INPUT (BTUH):         2,186,000						
SCHEDULE									
DAYS SCHEDUL SCHEDULE COMM				MONTH	SECHDULE	E NO:	1		
PRES START: PRES STOP:	SUN: MO 0 24	N: TUE: WE 0 0 24 24	D: THUR: 0 0 24 24	FRI: SAT:  0 24 24			i		
REQ START: REQ STOP:	0 24	0 0 24 24	0 0 24	0 0 24					
MONTHS JAN: ON:	FEB: MAR	: APR: MAY:	JUN: JUL:	AUG: SEP:	OCT: N	OV: DEC:			
CONTROLS	}								
OPERA	BLR CONTROL	T: 18	5 DEG F or PSIG	RESE	CONTROL	S: N			
	NER CONTROL OLS COMMENT								
HW PUMP		1							
PUMP TAG: PUMP SERVICE:	1 HW PUMP	PUMP HP:	1.	PUMP MODE					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/13/94

PREPARED BY: AJN/CWW

BUILDING NUMBER:	7050		E	BOILER F	RM LOCA	ATION:	MER		
<b>BOILER UNIT</b>									
SOURCE OF BLDG H	BLR/C	ONVERTER SI	ERVES ARE	A OR SE	RVICE:	SPACE	HEAT		
● 図 BOILER BOILER TAG:	BLR-2		- bononi	NVERTE VERTER					
BOILER TYPE: FUEL TYPE:	HW (UP TO 250 DEC	5)	CONV	ERTER 1	YPE:				
CENTRAL PLANT	DIRECT								
NAMEPLATE		9	% AREA HE	ATED BY	BB RAD	DIATION:			8
BOILER MFG: KEWANE UNIT MODEL: KW-40-1 COMMENTS:					UT (BTU UT (BTU			1,749,000 2,186,000	
SCHEDULE									
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	10				MONTH	SECHD	ULE NO	:	1
PRES STOP: 24	0 0 0 0 0 0	E: WED:  0 0 24 24 0 0 24 24	THUR: 0 24 0 24	FRI: 0 24 0 24	SAT: 0 24 0 24				
MONTHS JAN: FEB: ON:	MAR: APR:	MAY: JUI	N: JUL:	AUG:	SEP:	ост: ⊠	NOV:	DEC:	-
CONTROLS									
TYPE OF BLR CO OPERATING S TYPE OF BURNER CO CONTROLS CO	ETPOINT: ONTROLS: ALL		F or PSIG		RESE	T CONTR	ROLS: [	N	1
HW PUMP									
PUMP TAG: 1 PUMP SERVICE: HW PU		MP HP:	1.5	-	PUMP MF				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: AJN/CWW

BUILDING NUMBER:	7050	BOILER RM LOCA	TION: MER
BOILER UNIT			
	BLR/CONVERTER	SERVES AREA OR SERVICE:	KITCHEN
SOURCE OF BLDG H	HEAT		
● <u>BOILER</u>		CONVERTER	
BOILER TAG:		CONVERTER TAG:	
BOILER TYPE:		·	
FUEL TYPE:	NAT. GAS	CONV HT SOURCE:	
CENTRAL PLANT	T DIRECT		:
NAMEPLATE		% AREA HEATED BY BB RAD	IATION: 0
BOILER MFG: KEWAN	IEE	BLR CAP OUTPUT (BTU	1): 1,204,800
UNIT MODEL: KS-40-1	66-G	BLR CAP INPUT (BTUF	
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE NO:	23	MONTH	SECHDULE NO: 3
SCHEDULE COMMENTS:			
SUI	N: MON: TUE: WED:	THUR: FRI: SAT:	
PRES START:	0 0 0 0	0 0 0	•
PRES STOP: 2	24 24 24 24	24 24 24	
REQ START:	6 5 5 5		
REQ STOP: 2	24 24 24 24	24 24 24	:
MONTHS JAN: FEB	: MAR: APR: MAY: .	JUN: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF BLR C	ONTROLS: ELECTRIC	RESET	CONTROLS: N
OPERATING	SETPOINT: 0 D	EG F or PSIG	<del></del>
T/05 05 01101150 0	ONTROLE		
TYPE OF BURNER C	ONTROLS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: AJN/CWW

BUILDING N	JMBER: 🤵	7050				BOILER	RM LOC	ATION:	MER		
BOILER U	TIV										
SOURCE OF	BLDG HEA	λT	BLR/CON	VERTER	SERVES AF	REA OR S	ERVICE:	KITCHE	ΞN		
● □ BOIL	FR					CONVERT	FR				
	R TAG:					NVERTE		CV-1			
	R TYPE:	······································				VERTER		STM TO HT	THW		
FUE	L TYPE:		- 1784 17 Frank		COI	NV HT SO	URCE:	BLR-3			_ :
CENTRA	L PLANT D	IRECT									
IAMEPLA'	TE				% AREA H	EATED B	Y BB RA	DIATION			0
BOILER MFG:	:				BLR	CAP OUT	PUT (BTL	JH):		900,000	)
UNIT MODEL:						R CAP IN				C	)
COMMENTS:											
COMMENTO.											
CHEDULI	=										
DAYS SCHEDU	_	23			<del></del>		MONT	H SECHE	ULFNO		
CHEDULE COM	=									•	
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START:	0	0	0	0	0	0	0				
PRES STOP:		24	24	24	24	24	24				
REQ START:		5	5	5	5	5	6				
REQ STOP:	24	24	24	24	24	24	24				*
ONTHS JAN	: FEB:	MAR:	APR: I	MAY: J	UN: JUL	: AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$		$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	_
ONTROL	S										
TYPE OI	F BLR CON	ITROLS:	!				RESE	T CONTR	ROLS:	N	
OPER	RATING SE	TPOINT:		0 DE	G F or PSIC	3					
TYPE OF BU	RNER CON	ITROLS:									
CONT	ROLS COM	MENTS:	,								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/13/94

PREPARED BY: AJN/CWW

BOILER RM LOCATION: MER
SERVES AREA OR SERVICE: OTHER
CONVERTER
CONVERTER TAG:
CONVERTER TYPE:
CONV HT SOURCE: BLR-1 & BLR-2
% AREA HEATED BY BB RADIATION: 0
BLR CAP OUTPUT (BTUH): 0
BLR CAP INPUT (BTUH):
MONTH SECHDULE NO: 3
TIND PD. OAT.
THUR: FRI: SAT:
$\frac{0}{24}$ $\frac{0}{24}$ $\frac{0}{24}$
$\frac{24}{0}$ $\frac{24}{0}$ $\frac{24}{0}$
24 24 24
24 24 24
IUN: JUL: AUG: SEP: OCT: NOV: DEC:
RESET CONTROLS: N
EG F or PSIG
2 PUMP MFG: UNIMOUNT 1;25
PUMP MODEL: F040 TYPE: UT
2 PUMP MFG: UNIMOUNT 1;25
PUMP MODEL: F040 TYPE: UT

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: AJN/CWW

BUILDI	NG NUM	BER: 7	050				ı	BOILER I	RM LOC	ATION:	DHW	•	
BOILER	R UN	IT											
SOURG	CE OF B	I DG HEA	\Т	BLR/CO	NVERT	ER SER	VES ARE	A OR SE	RVICE:	ALL			
:			· · · · · · · · · · · · · · · · · · ·					NI (FDT	-n				: i
_	BOILER		N.D. 4			<u>-</u>		NVERTE	-				: :
	BOILER BOILER	-	BLR-4					VERTER 'ERTER '	-				<del></del> .
	FUEL .		NAT. GAS			<u> </u>	1	HT SOL	-				
	TOLL	11FL. P	NA1. GAS			:	CON	7 HT 300	JRUE.				
CE	NTRAL	PLANT D	IRECT										Waller Von Administrative
NAMER	PLAT	E				% A	REA HE	ATED BY	BB RAI	DIATION			
BOILER N	IFG: T	ELEDYN					BLR CA	AP OUTP	UT (BTU	H):		972,000	)
UNIT MOD	DEL: P	W1200IN	09CIA				BLR	CAP INP	UT (BTU	H):		1,200,000	)
COMMEN	NTS:												
SCHED	ULE												
DAYS SO SCHEDULE		==	10						MONT	1 SECHE	ULE NO	•	3
		SUN:	MON:	TUE:			UR:	FRI:	SAT:				
PRES S'		0	0	0	-	0 =	0	0	0				
REQ S		24	<u>24</u> 0	24		24 0	24	0	<u>24</u> 0				
	STOP:	24	24	24		24	24	24	24				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$			$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	· :
CONTR	OLS												
TY	PE OF I	BLR CON	ITROLS:	ELECT	RIC				RESE	T CONTE	ROLS:	N	
		TING SE				DEG F	or PSIG						
TYPE (	OF BURI	NER CON	TROLS:										
(	CONTRO	DLS COM	MENTS:										
HW PU	MP												
PUMP	TAG:	DHW-1		PUM	P HP:		0.16	7 F	PUMP ME	G: MA	RATHON	ELECTR	С
PUMP SEF	RVICE:	DHW						PUN	IP MODE	EL:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**EMC NO**: 1406-001 **DATE**: 10/13/94

PREPARED BY: AJN/CWW

# PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	7050			ВІ	DG NAME	: ENL BAI	RRACKS	W/AS			
PER RAD	(SYSTE	/ TAG) NO	D: RAD	y <u>-</u> 1		RAD	SYS LOC	ATION:	VESTIBU	LES, LAT	RINES	
sol	JRCE OF	HEATING	3: <u></u>				SERVES	AREA:				
RAD	IATION (	JNIT TYPI	E: HW				% ARE	A HTG:	,		8	
RADIA [*]	TION	PUM	P									
PUMP 1	ΓAG: 1			PUM	P HP:	0.75			UNIMOUI			
							PUMP N	IODEL:	F012A TY	PE UT		
SCHED	ULE											
DA	YS SCHI	EDULE NO	D:	10		MONTHS	SCHEDUL	E NO:		1		
SCHE	DULE C	OMMENT	S:									
		SUN:	MON:	TUE:	WED:		FRI:	SAT:				
PRES S		0	0	0			0	0				
PRES		24	24	24	24		24	24				
REQ S		0	0	0	0		0	0				
REQ	STOP:	24	24	24	24	24	24	24				1
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN: JU	JL: AUG	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$					$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTR	ROLS											
TY	PE OF R	AD. CON	TROLS:				= : ⊒					
	RADIA	TION CO	NTROL:	NONE			-					
	oc	C HT SPA	CE SP:	:	0							
		C HT SPA			0		I	RESET C	ONTROL	: N		
	CONTR	OL COM	MENTS:	3 WAY	VALVE IN	IMER		····				_

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

CWW AJN

BLDG:

7050

CHECKED BY: 7050.XLS

A 1 11 1 1 1 1 C			IG UNIT - HVAC I		OBSERVA	HONS			
AHU NO.:	AHU-1	LOCATIO	N (Rm) KITCH	EN					
AHU TYPE:	SZ	MFG.:			MODEL:				
SZ - Single Zone		ating & Vntltn	-	n Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	pe)		
MZ - Mulitzone		iable Air Vol.		Reheat System					
DD - Dual Duct	UH - Unit			nduction System					
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
COMMENTS:							DPR-ACT = Damp	er Actuator	
			W-2-1-1-1				RP-ACT = Replace	e Actuator	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:					
COMMENTS:				1					
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:				
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN					
INLET VANES	N/A: X	OK:	COMMENTS:	1					
RETURN AIR FAN	OK:		REPLACE FAN BEARINGS:   COMMENTS: N/A						
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A			
COMMENTS:		I VET E VOI		TOOMINE		14// 1			
O O MINIE A TO									
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
COMMENTS:							RP-ACT = Replace	Actuator	
·					i.		RP-BD = Replace	Body	
							<del></del>		
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:					
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:					
COMMENTS:		· · · · · · · · · · · · · · · · · · ·							
		OK: X	MISSING:	ESTIMAT	ED QUANTITY:				
PIPE INSULATION	N/A:								
PIPE INSULATION DUCT INSULATION COMMENTS:	N/A: N/A:	ОК: Х	MISSING:	ESTIMAT	ED QUANTITY:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

AJN AJN

BLDG:

7050

FILE:

CHECKED BY: 7050.XLS

			G UNIT - HVAC			110110			
AHU NO.:	FC-1	LOCATIO	N (RM) THRO	UGHOUT BUILD					
AHU TYPE:	FC 2D	MFG.:			MODEL:	4D ( 4D)			
SZ - Single Zone		ating & Vntltng		an Coil (Indicate :	2P for 2 Pipe or	4P for 4 Pip	e)		
MZ - Mulitzone		iable Air Vol.		Reheat System					
DD - Dual Duct	:UH - Unit			Induction System	- Inna com	יייור	100 107		
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:		
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:		
COMMENTS:		FAN CONTR					DPR-ACT = Damp	er Actuator	
	PERIMET	ER RADIATIO	ON IN EACH ROOM				RP-ACT = Replace	Actuator	
ILTER SECTION	N/A:	JOK: X	REPLACE:	SIZE:					
COMMENTS:									
	Nov. v	IDED: 405	EAN DEADWOO	10014151	ITC.				
SUPPLY AIR FAN	OK: X		FAN BEARINGS:	COMMEN					
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	COMMENTS:				
NLET VANES	N/A: X	OK:	COMMENTS:						
RETURN AIR FAN	OK:		FAN BEARINGS:		COMMENTS: N/A				
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	COMMENTS: N/A				
COMMENTS:									
			<del></del>						
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:	
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:	
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
COMMENTS:							RP-ACT = Replace	Actuator	
OOMMENTO.							RP-BD = Replace		
<u></u>									
		OK: REPLACE:		SIZE:					
AHU PUMP MOTOR	N/A: X		<u>i</u>	CIZE.					
AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE:					
AHU PUMP SEALS			REPLACE:	SIZE:					
AHU PUMP SEALS			REPLACE:	SIZE:					
AHU PUMP SEALS COMMENTS:	N/A: X	OK:							
AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY:				
	N/A: X	OK:		ESTIMAT	ED QUANTITY:				
AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMAT					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7050

FILE:

AIR	HANDLIN	IG UNIT - HVAC	UPGRADE	OBSERVA	TIONS		
HV-1	LOCATIO	N (Rm) MER (	SERVES KITCHI	EN AREA)			
H & V	MFG.:			MODEL:		· · · · · · · · · · · · · · · ·	
H&V - Hea	ating & Vntltn	g. FC - Fa	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	e)	
VAV - Var	iable Air Vol.	RHT -	Reheat System				
UH - Unit	Heater	IND - I	nduction System				
N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
15' OFF C	F MER FLO	OR				DPR-ACT = Dam;	er Actuator
						RP-ACT = Replac	e Actuator
No. co	101/						
N/A:	Jok:	REPLACE:	SIZE:				
OK: X	REPLACI	FAN BEARINGS:	COMMEN	ITS:			
OK: X	REPLACI		COMMEN	ITS:	OLD ~ 3H	IP .	
N/A: X	OK:	COMMENTS:			· · · · · · · · · · · · · · · · · · ·		
OK:	REPLACI	E FAN BEARINGS:	COMMEN	ITS:	N/A		
OK:	REPLACI	Ξ:	COMMEN	ITS:			
			**				
16.14	Torr	1959	loize		Wa.,		
	1				11		RP-BD:
							RP-BD:
	i		1		11		RP-BD:
IN/A: X	JUK:	REPLACE:	SIZE:	CNILVLV	_lok:		RP-BD:
						···	
						RP-BD ≈ Replace	Body
N							
N/A: X	JOK:	REPLACE:	SIZE:				
TAL/A	Toy.	hugonic	IFOTAL:	ED 01141171717		40,000	
			i			10 @ 3-1/2	·
N/A: X	JOK:	MISSING:	IESTIMAT	ED QUANTITY:			
	HV-1 H & V H&V - Hea VAV - Var UH - Unit  N/A: N/A: X N/A: X N/A: X  N/A: X  N/A: X  OK: X  OK: X  OK: X  OK: X  OK: X	HV-1 LOCATION H & V MFG.: H & V - Heating & Vntltn VAV - Variable Air Vol. UH - Unit Heater  N/A: OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK:  N/A: X OK:  N/A: X OK:  N/A: X OK:  N/A: X OK:  N/A: X OK:  N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK:	HV-1 LOCATION (Rm) MER (S) H & V MFG.: H & V MFG.: H & V - Heating & Vntling. FC - Fa VAV - Variable Air Vol. RHT - I UH - Unit Heater IND - Ir N/A: OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  OK: REPLACE:  OK: X REPLACE: N/A: X OK: COMMENTS: OK: REPLACE:  N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE:	HV-1 LOCATION (Rm) MER (SERVES KITCH) H & V MFG: H&V - Heating & Vntltng. FC - Fan Coil (Indicate VAV - Variable Air Vol. RHT - Reheat System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System INDUction Induction System INDUction INDUction Induction System INDUction Induction System INDUction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Ind	HV-1 LOCATION (Rm) MER (SERVES KITCHEN AREA) H & V MFG.: MODEL: H&V - Heating & Vntiting. FC - Fan Coil (Indicate 2P for 2 Pipe or VAV - Variable Air Vol. RHT - Reheat System IND - Induction System    N/A: OK: X REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     N/A: X OK: REPLACE: SIZE: DPR-ACT     OK: X REPLACE: SIZE: DPR-ACT     OK: X REPLACE: SIZE: DPR-ACT     OK: X REPLACE: SIZE: COMMENTS:     OK: X REPLACE: COMMENTS:     OK: REPLACE: COMMENTS:     OK: REPLACE: COMMENTS:     OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: SI	H & V MFG.: MODEL:  H&V - Heating & Vniting. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe VAV - Variable Air Vol. RHT - Reheat System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System IND - Induction System INDuction INDUction INDUction INDUction INDUction INDUction INDUction INDUction INDUction INDUction INDUction INDUction INDUction INDUCTION INDUCTION INDUCTION INDUCTION INDUCTION INDUCTION INDUCTION INDUCTION INDUCTION IND	HV-1

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7050

FILE:

			VERTER - HVAC UP		OBSEK	VATIONS
BOILER/CONVERTER NO		BLR 1-4	LOCATION (RM)	MER		
BOILER TYPE:		HW & ST			MODEL:	
CONVERTER TYPE:			MFG.:		MODEL:	
STM - Steam		- Steam to Hot			-	np HW to Steam Converto
HW - Hot Water			. HW to HW Cv.			Vater Convertor
BOILER BURNER	ATMOSP		POWER: X	ОК:	Χ	REPLACE:
COMMENTS:	GOOD CO	ONDITION - NE	:W BOILERS			
						W.
BLR PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
BLR PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		A.F. 10-7-
COMMENTS:						
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED	QUANTIT	Υ:
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED	QUANTIT	Y:
COMMENTS:						
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP MOTOR						
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP SEALS HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS				<del></del>		
HW PUMP SEALS HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: X N/A: X	OK: OK:	REPLACE:	SIZE: SIZE:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR	N/A: X N/A: X	OK: OK:	REPLACE: REPLACE:	SIZE: SIZE:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X	OK: OK:	REPLACE:	SIZE: SIZE:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR	N/A: X N/A: X	OK: OK:	REPLACE: REPLACE:	SIZE: SIZE:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X	OK: OK:	REPLACE: REPLACE:	SIZE: SIZE:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X	OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/13/94

39,675

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

#### **BUILDING DATA SURVEY OBSERVATIONS**

CONDITIONED SQFT:

BLDG NUMBER: 7053 BLDG NAME: ENL BARRACKS W/AS

ELECTRIC METER: N

GAS METER: N
SUSPECT ACM: N

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

MON: TUE: WED: THUR: FRI: SUN: PRES START: 0 0 0 24 24 24 24 24 24 PRES STOP: 24 0 0 0 0 0 REQ START: 0 0 24 24 24 24 24 REQ STOP: 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/13/94 PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER REFRIG SYS # SRVNG AH	R: FC-1 HU: CENTRAL PLANT	AHU LOCATION: THROUGHOUT BLDG  SERVES AREA: BARRACKS DG AREA HEATED: 92	
AHU UNIT TYPE FAN C		NUMBER OF ZONES IF MZ UNIT: 0	
CFM-HTG: MIN %OA:	37,200	CFM-CLG: 37,200 MAX %OA: 0	
NAMEPLATE			
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:	7.5 TOTAL FOR FAN COILS	UNIT MODEL:  RET/EXH FAN HP:  RET/EXH FAN MTR MFG:  RET/EXH FAN MTR MODEL:	
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: HEATING COIL: REHEAT COIL: HUMIDIFIER: COOLING COIL:	DUAL TEMP WATER NONE NONE		
DAY SCHEDULE NO: SCHEDULE COMMENTS:	10	MONTH SCHEDULE NO: 3	
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24	MON:         TUE:         WED:         T           0         0         0         0           24         24         24         24           0         0         0         0           24         24         24         24	THUR: FRI: SAT:  0 0 0 0 24 24 24 0 0 0 24 24 24 24 24	
MONTHS JAN: FEB: ON:	MAR: APR: MAY: JUN	I: JUL: AUG: SEP: OCT: NOV: DEC:	
CONTROLS		,	
TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL EXH AIR DMPR CONTROL	R OCC: 0  NOCC: 0  NOCC: 0  NOCC: 0  NOCC: 0  MIXED AIR DMP  IN ECONOMIZER D  ECONOMIZER W	B CONTROL: N TIME CLOCK	: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: AJN/CWW

BUILDING N	JMBER:	7053				BOILER	RM LOCA	ATION:	MER		
<b>SOILER UI</b>	NIT										
SOURCE OF	BLDG HE		BLR/CON	IVERTER	SERVES AR	EA OR SE	RVICE:	ALL			
● ⊠ BOIL						ONVERTI	ER				
BOILE	R TAG:	BLR-1				NVERTER	-				
	R TYPE:		250 DEG)		:	VERTER	i				_
FUE	L TYPE: 1	NAT. GAS			CON	IV HT SOL	JRCE:				
CENTRA	L PLANT D	IRECT									
IAMEPLA'	TE				% AREA H	EATED BY	/ BB RAI	DIATION	:		8
BOILER MFG:	KEWANEE				BLR (	CAP OUTP	UT (BTU	H):		1,749,000	
UNIT MODEL:	KW-40-192	2-G			BLF	R CAP INP	UT (BTU	H):		2,186,000	
COMMENTS:											
CHEDULI	E										
DAYS SCHEDU	=	10					MONTH	H SECHE	DULE NO	•	1
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				-
PRES START: PRES STOP:		0	24	24	0	0 =	24				
REQ START:		0	= 24	0	0 =	== <del>==</del> =	0				:
REQ STOP:		24	24	24	24	24	24				:
MONTHS JAN	: FEB:	MAR:	APR:	MAY: J	UN: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	_ _ ;
ON: ⊠	$\boxtimes$	$\boxtimes$	$\boxtimes$					$\boxtimes$			_
CONTROL	S										
TYPE O	F BLR CO	NTROLS:	ELECTR				RESE	T CONT	ROLS: [	N	
	RATING SE			185 DE	G F or PSIC	6					
TYPE OF BU	RNER CO	NTROLS:									
CONT	ROLS COM	MENTS:									
W PUMP											
PUMP TAG	: 1		PUM	P HP:			PUMP ME				
<b>PUMP SERVICE</b>	: HW PUN	/IP		:		PU	MP MOD	EL:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94
PREPARED BY: AJN/CWW

BUILDING NUMBER: 70	53	BOI	LER RM LOCATION:	MER	
BOILER UNIT					
SOURCE OF BURGUEAT		TER SERVES AREA (	OR SERVICE: ALL		
— SOURCE OF BLDG HEAT					
● N BOILER		CONV			_
BOILER TAG: BLI			RTER TAG: TER TYPE:		-
BOILER TYPE: HW FUEL TYPE: NA	<del></del>	·	SOURCE:		
CENTRAL PLANT DIR	RECT				
NAMEPLATE		% AREA HEATE	ED BY BB RADIATIO	N:	8
BOILER MFG: KEWANEE		BLR CAP	OUTPUT (BTUH):	1,749,000	
UNIT MODEL: KW-40-192-0	3	BLR CA	P INPUT (BTUH):	2,186,000	
COMMENTS:	AND THE RESERVE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF				
SCHEDULE					
DAYS SCHEDULE NO:SCHEDULE COMMENTS:	10		MONTH SECH	IDULE NO:	1
SUN:	MON: TUE: W	ED: THUR: FR	I: SAT:		-
PRES START: 0	0 0	0 0	0 0		
PRES STOP: 24	24 24		24		
REQ START: 0 REQ STOP: 24	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$		0 0 24		
NEWOTOT: 27		24 24 2	.4		-
	MAR: APR: MAY:	JUN: JUL: A	UG: SEP: OCT	: NOV: DEC:	_
ON:					
CONTROLS					
TYPE OF BLR CONT	ROLS: ELECTRIC		RESET CON	TROLS: N	
OPERATING SET	<u> </u>	5 DEG F or PSIG			
TYPE OF BURNER CONT	ROLS:				
CONTROLS COMM	ENTS:				
HW PUMP					
PUMP TAG: 1	PUMP HP:	1.5	PUMP MFG:		
PUMP SERVICE: HW PUMP		!	PLIMP MODEL:		i

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/13/94

PREPARED BY: AJN/CWW

BUILDING NUMBER	R: 7053	BOIL	ER RM LOCATIO	N: MER	
BOILER UNIT					
	BLR/CONVI	RTER SERVES AREA OF	R SERVICE:		
SOURCE OF BLDG					
● □ BOILER		CONVE	RTER		:
BOILER TAG	3:	CONVER	TER TAG:		
BOILER TYPI	Ē:	CONVERT	ER TYPE:		
FUEL TYPI	Ē:	F CONV HT	SOURCE: BLR-1	, BLR-2	
CENTRAL PLA	NT DIRECT				
NAMEPLATE		% AREA HEATEI	D BY BB RADIAT	ION:	0
BOILER MFG:	2000	BLR CAP O	UTPUT (BTUH):		0
UNIT MODEL:		BLR CAP	INPUT (BTUH):		0
COMMENTS:					
SCHEDULE					; 
DAYS SCHEDULE NO	D: 10		MONTH SE	CHDULE NO:	3
SCHEDULE COMMENTS	S:				
S	UN: MON: TUE:	WED: THUR: FRI	: SAT:		
PRES START:	0 0 0	0 0 0	0		:
PRES STOP:	24 24 24	24 24 24			,
REQ START:	0 0 0	0 0 0			i
REQ STOP:	24 24 24	24 24 24	1 24		<u>.</u>
MONTHS JAN: FE	EB: MAR: APR: MA	Y: JUN: JUL: AL	JG: SEP: O	CT: NOV: DEC:	
ON: ⊠					
OONTDO! O					
CONTROLS					<del></del>
TYPE OF BLR			RESET CO	ONTROLS: N	
	G SETPOINT:	0 DEG F or PSIG			
TYPE OF BURNER	CONTROLS:				
CONTROLS	COMMENTS:				
HW PUMP					
PUMP TAG: DTV	NP-1 PUMP I	HP:2	PUMP MFG:	UNIMOUNT 1;25	
PUMP SERVICE: DU	AL TEMP PUMP		PUMP MODEL:	F040 TYPE: UT	
HW PUMP					
PUMP TAG: DTV	WP-2 PUMP I	1P: 2	PUMP MFG:	UNIMOUNT 1;25	
PUMP SERVICE: DU	AL TEMP PUMP		PUMP MODEL:	F040 TYPE: UT	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/13/94

PREPARED BY: AJN/CWW

BUILDING NUMBER: 7053	BOILER RM LOCATION: MER
BOILER UNIT	
	LR/CONVERTER SERVES AREA OR SERVICE: DHW
BOILER BOILER TAG: BLR-3 BOILER TYPE: NAT. GAS	CONVERTER  CONVERTER TAG:  CONVERTER TYPE:  CONV HT SOURCE:
CENTRAL PLANT DIRECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION:
BOILER MFG: TELEDYNE LAARS UNIT MODEL: PW075 IN09CIA	BLR CAP OUTPUT (BTUH): 579,150 BLR CAP INPUT (BTUH):
SCHEDULE	
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:	MONTH SECHDULE NO: 3
SUN:         MON:           PRES START:         0         0           PRES STOP:         24         24           REQ START:         0         0           REQ STOP:         24         24	TUE:         WED:         THUR:         FRI:         SAT:           0         0         0         0           24         24         24         24           0         0         0         0           24         24         24         24           24         24         24         24
ON:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF BLR CONTROLS: E OPERATING SETPOINT: TYPE OF BURNER CONTROLS:	DEG F or PSIG
CONTROLS COMMENTS:	
HW PUMP	
PUMP TAG: DHW-1 PUMP SERVICE: DHW	PUMP HP: 0.17 PUMP MFG: MARATHON PUMP MODEL:
PUMP TAG: DTWP-2 PUMP SERVICE: DUAL TEMP PUMP	PUMP HP: 0.33 PUMP MFG: BOILER PUMP PUMP MODEL:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94
PREPARED BY: AJN/CWW

### PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	7053				BLDG N	AME:	ENL BAF	RACKS	W/AS			
PER RAD SOL	•	TAG) NO HEATING	parties or the same	-1				YS LOCA SERVES		VESTIBU	LES/LAT	RINES	
RAD	IATION L	JNIT TYPE	: HW					% AREA	HTG:			8	
RADIA ⁻	TION	PUMF	·										
PUMP 1	ΓAG: 1			PUM	P HP:	0.7			MFG:	UNIMOU			
								PUMP M	ODEL:	F012A TY	PE: UT		
SCHED	ULE												
DA	YS SCHE	EDULE NO	:	10		MON	ITHS S	CHEDULE	NO:		1		
SCHE	DULE C	OMMENTS	:										
		SUN:	MON:	TUE:	WEI	D: TH	UR:	FRI:	SAT:				
PRES S	TART:	0	0	0		0	0	0	0				:
PRES		24	24	24		24	24	24	24				
REQ S	:	0	0	0		<u> </u>		0	0				
REQ	STOP:	24	24	24		24	24	24	24				:
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$							$\boxtimes$		$\boxtimes$	
CONTR	ROLS												
TY	PE OF R	AD. CONT	ROLS:	1									
	RADIA	TION CON	TROL:	NONE									
	oc	C HT SPA	CE SP:		0								
	UNOC	C HT SPA	CE SP:		0			F	RESET C	ONTROL:	N		
	CONTR	OL COMM	IENTS:	3 WAY	VALVE	IN MER							

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BIDG: **7053** 

FI

FILE: 7053 XLS

			BLDG:	7053		FILE:	7053.XLS	
	AIR	HANDLIN	G UNIT - HVAC	<b>UPGRADE</b>	OBSERVA	TIONS		
AHU NO.:	FC-1	LOCATIO	N (Rm) THROU	JGHOUT BUILDI	NG			
AHU TYPE:	FC 2P	MFG.:	· · · · · · · · · · · · · · · · · · ·		MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltng	j. FC - Fa	n Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pip	e)	······································
MZ - Mulitzone	-VAV - Var	iable Air Vol.	RHT - I	Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - Ir	duction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	3 SPEED	FAN CONTR	OL. PERIMETER RADIA	ATION IN EACH	ROOM		DPR-ACT = Dampi	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:	***************************************		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	TS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	TS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE	. '	COMMEN	TS:	N/A		
COMMENTS:				<u>\</u>			***************************************	
		······································						
F 1 200 10 10 10 10 10 10 10 10 10 10 10 10 1			· · · · · · · · · · · · · · · · · · ·					
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	Actuator
							RP-BD = Replace I	Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		- <del>(*.)</del>		
AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS								
AHU PUMP SEALS								
AHU PUMP SEALS				SIZE:	ED QUANTITY:			
AHU PUMP SEALS COMMENTS:	N/A: X	OK:	REPLACE:	SIZE:	ED QUANTITY:			
AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X	OK:	REPLACE:	SIZE:				

# ${\bf E}\ {\bf M}\ {\bf C}$ ENGINEERS, INC.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7053

FILE:

	BOILE	R & CON	/ERTER - HVAC UI	PGRADE OBS	SERVATIONS
BOILER/CONVERTER NO	).	BLR-1,3	LOCATION (RM)	MER	
BOILER TYPE:		HW	MFG.: KEWANEE	1 .	DEL:
CONVERTER TYPE:			MFG.:	1	DEL:
STM - Steam	-	- Steam to Hot			h Temp HW to Steam Convertor
HW - Hot Water			HW to HW Cv.		Hot Water Convertor
BOILER BURNER	ATMOSPI		PÖWER:	ОК:	REPLACE:
COMMENTS:	GOOD CO	ONDITION - NE	W		
	· · · · · · · · · · · · · · · · · · ·				
BLR PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:					
				· · · · · · · · · · · · · · · · · · ·	
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUA	ANTITY:
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUA	ANTITY:
COMMENTS:					
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	4.00
HW PUMP SEALS	N/A:	OK: X	REPLACE:		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:		···			
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:		<u> </u>			
CV INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUA	
CV PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUA	ANTITY.
COMMENTS:					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

**BUILDING DATA SURVEY OBSERVATIONS** 

**BLDG NUMBER: 8002** 

GAS METER: N SUSPECT ACM: N

**BLDG NAME: ENL BARRACKS W/O DIN** 

ELECTRIC METER: N

24

CONDITIONED SQFT:

22,700

**BUILDING OCCUPANCY SCHEDULE** 

10

24

BUILDING SCHDULE NO:

SUN: MON: TUE: WED: THUR: FRI: SAT: 0 0 0 0 0 24 24 24 24 24 24 24 0 0 0 0 0 0 0

24

24

24

24

**REMARKS:** 

PRES START:

PRES STOP:

REQ START:

REQ STOP:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/11/94 PREPARED BY: JM/AJN

BUILDING NUMBER		AHU LOCATION:	THROUGHO	UT	
REFRIG SYS # SRVNG AF	HU: CV-1	SERVES AREA: A	(LL		
		G AREA HEATED:		100	
AHU UNIT TYPE FAN C	OILS - 2 PIPE	NUM	BER OF ZONE	ES IF MZ UNIT:	0
CFM-HTG:	28,800	CFM-CLG:	2	8,800	
MIN %OA:	0	MAX %OA:		0	
NAMEPLATE					
UNIT MFG:		UNIT	MODEL:		
SUPPLY FAN HP:	5	RET/EXH F	AN HP:	0	
SUPPLY FAN MTR MFG:		RET/EXH FAN MT	R MFG:		
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR I	MODEL:		
COMMENTS:	TOTAL FOR 72 FAN COILS				
COILS					
Coil	Coil Type	Modulating Va	lve?		
PREHEAT COIL:	NONE				
	DUAL TEMP WATER	— 🗵			
	NONE				
HUMIDIFIER:		<b>-</b>			
COOLING COIL:					
SCHEDULE		<del></del> : <del></del>			
DAY SCHEDULE NO:	10		MONTH SCHE	DILLE NO:	3
SCHEDULE COMMENTS:				.DOLL NO.	
SUN:		IUR: FRI: SA	T:		
PRES START: 0	00	0 0	0		
PRES STOP: 24	24 24 24	24 24	24		1
REQ START: 0	0 0 0	0 0	0		
REQ STOP: 24	24 24 24	24 24	24		
	MAR: APR: MAY: JUN:	JUL: AUG: S	EP: OCT:	NOV: DEC:	
ON:					1 2
CONTROLS					
TYPE OF CONT	ROLS: ELECTRIC		STAT TYPE:	SINGLE SETPOIN	
PRESENT TEMP WINTE	R OCC: 0		ECK DEG F:		0
PRESENT TEMP WINTR U	NOCC: 0		ECK DEG F:		0
PRESENT TEMP SUN	1000		AIR DEG F:		0
PRESENT TEMP SUN		OTHER SETPOINT			0
PRESENT TEMP SUM U	NOCC: 0	OTHER DETICO	INTI DEGT.		<u>-</u>
					_
PRESENT TEMP SUM U	.: N MIXED AIR DMPR	CONTROL: N II		DEMAND LIMIT CN	TRLS? N
PRESENT TEMP SUM UI MIN OA DMPR CONTROL MAX OA DMPR CONTROL	.: N MIXED AIR DMPR .: N ECONOMIZER DB	CONTROL: N II	MPLEMENT D	DEMAND LIMIT CN	ITRLS? N
PRESENT TEMP SUM UI	.: N MIXED AIR DMPR .: N ECONOMIZER DB .: N ECONOMIZER WB	CONTROL: N II	MPLEMENT D	DEMAND LIMIT CN	ITRLS? N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/11/94

PREPARED BY: JM/AJN

### **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING	NUMBER: 8	8002			E	BOILER RM	LOCAT	TION:	MER		
BOILER (	JNIT										-
· · · · · · · · · · · · · · · · · · ·		·····	BLR/CON	VERTER SE	RVES ARE	A OR SERV	ICE:	ALL			
SOURCE (	OF BLDG HE	AT									
	ILER				⊠ cc	NVERTER					
ВО	ILER TAG:				7	VERTER TA	222	/-1			_ :
	ER TYPE:					ERTER TYP		M TO HW			_ :
Fl	JEL TYPE:				CONV	HT SOURC	E: CE	NTRAL P	LANT		
● CENTF	RAL PLANT D	DIRECT									
NAMEPL	ATE			%	AREA HE	ATED BY BE	3 RADI	ATION:			0
BOILER MFG	:			1	BLR CA	AP OUTPUT	(BTUH	):		650,000	
UNIT MODEL	:			:	BLR	CAP INPUT	(BTUH	):		0	
COMMENTS	i:				***						
SCHEDU	LE										
DAYS SCHE SCHEDULE CO	=	10				M	ONTH	SECHD	ULE NO:		<u>3</u> 
DDEC CTAI	SUN:	MON:	TUE:	WED: T	HUR:	FRI: SA	ΛT: 0				
PRES STAF		24	24	24	24		24				
REQ STAF			0		<del></del>	0	0,				
REQ STO		24	24	24	24	24	24				
MONTHS JA	AN: FEB:	MAR:	APR: N	MAY: JUN	: JUL:	AUG: S	SEP:	OCT:	NOV:	DEC:	-
ON: [	$\boxtimes$	$\boxtimes$	$\boxtimes$				3				_
CONTRO	LS										
TYPE	OF BLR CO	NTROLS:	ELECTR	IC		F	RESET	CONTR	ols: [	N	
	PERATING SE			0 DEG I	or PSIG						
TYPE OF I	BURNER CO	NTROLS:									
COI	NTROLS COM	MENTS:									
HW PUM	Р										
PUMP TA	AG: DTWP-1		PUMP	HP:			/IP MF		ELECTI		
PUMP SERVI	CE: DUAL T	EMP PUM	IP			PUMP	MODE	L: F80	74-01239	L154R033	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 7 Nov-94

CHECKED BY:

AJN AJN

BLDG:

8002

FILE: 8002.XLS

	AIK	HANDLIN	IG UNIT - HVAC I	JPGRADE	ORSEKAN	IIUIYO		
AHU NO.:	FC-1	LOCATIO	N (Rm) ALL					
AHU TYPE:	FC 2P	MFG.:			MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltn	g FC - Fa	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	pe)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT - I	Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - Ir	nduction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
COMMENTS:				· · · · · · · · · · · · · · · · · · ·			DPR-ACT = Damp	er Actuator
					<u></u>		RP-ACT = Replace	
. 277.812								
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:			<del></del>	
COMMENTS:								1.11.11
SUPPLY AIR FAN	OK: X	REPLACI	E FAN BEARINGS:	COMMEN	NTS:		<del> </del>	
SUPPLY FAN MOTOR	OK: X	REPLACI	<u>=</u> :	COMMEN				
	N/A: X	lok:	COMMENTS:					
INLET VANES	11 ×/ / \ \							
				ICOMMEN	ITS:	N/A		
RETURN AIR FAN	OK:	REPLACI	E FAN BEARINGS:	[COMMEN		N/A N/A		
RETURN AIR FAN RETURN FAN MOTOR			E FAN BEARINGS:	COMMEN		N/A N/A		
RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACI	E FAN BEARINGS:					
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK: OK:	REPLACI	E FAN BEARINGS: E:	COMMEN	ITS:	N/A		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK: OK:	REPLACI	E FAN BEARINGS: E:    REPLACE:	COMMEN	ITS:	N/A N/A	RP- ACT:*	RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK: N/A: N/A: X	REPLACION OK: X	FAN BEARINGS: E:  REPLACE:  REPLACE:	SIZE:	CNTLVLV CNTLVLV	N/A OK: OK:	RP- ACT:	RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: N/A: X N/A: X	REPLACI REPLACI OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT:	RP-BD RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	N/A OK: OK:	RP- ACT:	RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT:	RP-BD RP-BD RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR	OK: OK: N/A: N/A: X N/A: X N/A: X  N/A: X  N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR	N/A: N/A: X N/A: X N/A: X N/A: X *SEVERA	OK: X OK: OK: OK: OK: L ARE LEAK	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: N/A: X N/A: X N/A: X  N/A: X  N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: N/A: X N/A: X N/A: X  N/A: X  N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	OK: OK: N/A: N/A: X N/A: X N/A: X  N/A: X  N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:  PIPE INSULATION DUCT INSULATION	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK: COK: COK: COK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY: 8002 FILE: 8002.XLS

	LEK	& C	ONV	ERTER - HVA	CUPGRAL	DE OBSERVATIONS
BOILER/CONVERTER I	NO.	(	CV-1	LOCATION (RM)	) MER	
BOILER TYPE:				MFG.:		MODEL:
CONVERTER TYPE:				W MFG.:		MODEL:
STM - Steam	STM/	HW -	Steam	to Hot Water Conv		TM - High Temp HW to Steam Convertor
HW - Hot Water	HTHV	V/HW	/ - High	Temp. HW to HW		omestic Hot Water Convertor
BOILER BURNER	ATM	OSPH	ERIC:	POWER:	OK:	REPLACE:
COMMENTS:						
BLR PUMP MOTOR	N/A:	X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A:	Х	OK:	REPLACE:	SIZE:	
COMMENTS:						
DID INCLUATION	N/A:	V T	OK:	MISSING:	IESTIMA:	TED QUANTITY:
BLR INSULATION PIPE INSULATION	N/A:		OK:	MISSING:		TED QUANTITY:
COMMENTS:	IN/A:		UK.	IMISSING.	TEST INIX	TED COANTITY.
HW PUMP MOTO	N/A:	I	OK: X	REPLACE:	SIZE:	UNIMOUNT, 5 HP
HW PUMP MOTO HW PUMP SEALS			OK: X OK: X		SIZE: SIZE:	UNIMOUNT, 5 HP
	N/A:			REPLACE:		UNIMOUNT, 5 HP
HW PUMP SEALS	N/A:	X	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS HW PUMP MOTO	N/A: N/A: N/A:	X X	OK: X OK:	REPLACE:	SIZE: SIZE: SIZE: SIZE:	
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS	N/A: N/A: N/A: N/A:	X X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO	N/A: N/A: N/A: N/A: N/A: N/A:	X X X X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A:	X X X X X	OK: X OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	X X X X X X X TROL	OK: X OK: OK: OK: OK: OK: OK: VALV	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	1/3 HP
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	X X X X X X X TROL	OK: X OK: OK: OK: OK: OK: OK: VALV	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	1/3 HP
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	X X X X X X X TROL	OK: X OK: OK: OK: OK: OK: OK: VALV	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	1/3 HP
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	X X X X X X X TROL	OK: X OK: OK: OK: OK: OK: OK: VALVI	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	1/3 HP  KS IN AREA.
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   OVEF	X X X X X X X TROL	OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: VALVI CONDI	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	1/3 HP  KS IN AREA.
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   OVEF	X X X X X X X TROL	OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: VALVI CONDI	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	1/3 HP  KS IN AREA.
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   OVEF	X X X X X X X X X X X X X X X X X X X	OK: X OK: OK: OK: OK: OK: OK: OK: OK: VALVI CONDI	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	1/3 HP  KS IN AREA.  ~ 1/3 HP FOR DOMESTIC HW/CONV.
HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO HW PUMP SEALS HW PUMP MOTO	N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   N/A:   OVEF	X X X X X X X X X X X X X X X X X X X	OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK: VALVI CONDI	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: ES OK. TION, SAME AS OT	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	1/3 HP  KS IN AREA.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 8012 BLDG NAME: ENL

**BLDG NAME: ENL BARRACKS W/O DIN** 

GAS METER: N

SUSPECT ACM: N

Υ

CONDITIONED SQFT:

22,700

### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

FRI: THUR: SAT: SUN: MON: TUE: WED: 0 0 0 0 0 PRES START: 0 0 24 24 24 24 24 PRES STOP: 24 0 0 0 0 0 0 **REQ START:** 0 REQ STOP: 24 24 24 24 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

BUILDING NUMBER: 801 AHU NUMBER: FC-		: THROUGHOUT BLDG
REFRIG SYS # SRVNG AHU: C	V-1 SERVES AREA: % OF BLDG AREA HEATED:	ALL 100
AHU UNIT TYPE FAN COILS -	2 PIPE NU	IMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: MIN %OA:	28,800 CFM-CLG: 0 MAX %OA:	28,800
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL:		
Coil PREHEAT COIL: NONE	TEMP WATER	Valve?
DAY SCHEDULE NO: 10 SCHEDULE COMMENTS: SUN: MON:	TUE: WED: THUR: FRI: \$	MONTH SCHEDULE NO: 3  SAT:
PRES START:         0         0           PRES STOP:         24         24           REQ START:         0         0           REQ STOP:         24         24	0     0     0       24     24     24       0     0     0       24     24     24	0 24 0 24
MONTHS JAN: FEB: MAR: ON:  CONTROLS	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
TYPE OF CONTROLS:  PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC:  PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC:  MIN OA DMPR CONTROL:  MAX OA DMPR CONTROL:  RET AIR DMPR CONTROL:  EXH AIR DMPR CONTROL:  N  OTHER CONTROLS DESCR:	0 COLD 0 MIXE 0 OTHER SETPOI	OSTAT TYPE: SINGLE SETPOINT  DECK DEG F: 0  DECK DEG F: 0  DAIR DEG F: 0  INT DESCRIP: 0  IMPLEMENT DEMAND LIMIT CNTRLS? N  TIME CLOCK: N  TIME CLOCK OPERATIONAL? N
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDI	NG NUN	MBER: 8	3012				1	BOILER	RM LOC	CATION:	MER		
BOILER	R UN	IT											
				BLR/CO	NVER1	TER SER	VES ARE	A OR SE	RVICE:	ALL			
SOURC	E OF B	LDG HEA	ΛT							:			
: O T	BOILER	₹					⊠ <u>c</u> c	NVERT	ER				
. <u> </u>	BOILER	TAG:					CON	VERTER	TAG:	CV-1			
В	OILER	TYPE:					CONV	ERTER	TYPE:	STM TO H	٧		
	FUEL 1	TYPE:					CON	HT SOU	JRCE:	CENTRAL	PLANT		
CE	NTRAL	PLANT D	IRECT										;
NAMEP	LAT	E				% /	AREA HE	ATED BY	/ BB RA	DIATION			0
BOILER M	IFG:						BLR CA	P OUTP	UT (BT	UH):		650,000	-
UNIT MOD	EL:						BLR	CAP INP	UT (BT	JH):		0	=
COMMEN	ITS:												7
CHED	ULE												
DAYS SC	HEDUL	E NO:	10						MONT	H SECHE	ULE NO		3
SCHEDULE		=		<del></del>					,			<del> </del>	
		SUN:	MON:	TUE:	W	ED: Ti	HUR:	FRI:	SAT:				_
PRES S	TART:	0	0	. 0		0 -	0 -	0	0				
PRES S		24	24	24		24	24	24	24				:
REQ S	TART:	0	0	0		0	0	0	0				:
REQ S	STOP:	24	24	24		24	24	24	24				:
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	ост:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$		$\boxtimes$	$\boxtimes$				$\boxtimes$	×		$\square$	
CONTR	OLS												
TY	PE OF I	BLR CON	ITROLS:	ELECTI	RIC				RESI	ET CONTI	ROLS: [	N	
		TING SE				0 DEG F	or PSIG				-		
TYPE C	F BURI	NER CON	ITROLS:			<del></del>							
(	CONTRO	DLS COM	MENTS:										
HW PU	MP												
PUMP	TAG:	DTWP-1		PUM	P HP:			3 1	PUMP N	IFG: GO	ULD		
PUMP SEF	RVICE:	DUAL TE	MP PUM	IP				PUI	MP MOD	EL:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

8012

FILE: 8012.XLS

UIII NO .			G UNIT - HVAC	OI OIVADE	CDULITYA	110110		
AHU NO.:	FC-1	LOCATIO	N (Rm) ALL		IMODEL:			
AHU TYPE:	FC 2P	MFG.:	- FA F	C-il (I-di-ot-	MODEL:	AD for A Dir		
SZ - Single Zone		ating & Vntltng	•	an Coil (Indicate	2P for 2 Pipe or	4P 101 4 PIF	oe)	
MZ - Mulitzone DD - Dual Duct		able Air Vol.		Reheat System nduction System				
	UH - Unit I				DDD 40T	Tox	IDD ACT	
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:		
COMMENTS:							DPR-ACT = Damper	Actuator
							RP-ACT = Replace A	Actuator
E!! TED 0507:01:	76.77	Tarr		10				
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:	<del></del>			
COMMENTS:	~							
SUPPLY AIR FAN	OK: X		FAN BEARINGS:	COMMEN				
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMEN	ITS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	ITS:	N/A		
COMMENTS:							· · · · · · · · · · · · · · · · · · ·	
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:*	RP-BD:
	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:*	RP-BD:
HEATING COIL	- 11	7		•				
HEATING COIL PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X *SEVERA	OK: OK: OK: L ARE LEAK	REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X *SEVERA	OK: OK: OK: L ARE LEAK	REPLACE: REPLACE: Y OR INOPERABLE REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X *SEVERA	OK: OK: OK: L ARE LEAK	REPLACE: REPLACE: Y OR INOPERABLE REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X *SEVERA	OK: OK: OK: L ARE LEAK	REPLACE: REPLACE: Y OR INOPERABLE REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X *SEVERA N/A: N/A:	OK: OK: LARE LEAK	REPLACE: REPLACE: Y OR INOPERABLE  REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X *SEVERA	OK: OK: OK: L ARE LEAK	REPLACE: REPLACE: Y OR INOPERABLE REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace A	RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

8012

FILE:

					OBSERVATIONS
BOILER/CONVERTER NO.		CV-1	LOCATION (RM)	MER	1
BOILER TYPE:			MFG.:		MODEL:
CONVERTER TYPE:		STM/HW	MFG.:	. IT. 04/07	MODEL:
STM - Steam		- Steam to Ho			M - High Temp HW to Steam Convertor
HW - Hot Water			. HW to HW Cv.		omestic Hot Water Convertor
BOILER BURNER	ATMOSPI		POWER:	OK:	REPLACE:
COMMENTS:	10" X 4.5'	LONG			
					total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total and total
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY:
PIPE INSULATION	N/A: X	OK:	MISSING:		ED QUANTITY:
COMMENTS:					
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	CENTURY 1 HP
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	NOT BOLTED DOWN WITH WIRES
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	EXPOSED
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SiZE:	
COMMENTS:					
		<u> </u>			
1	N/A: X	OK:	REPLACE:	SIZE:	
CV PUMP MOTOR		101/	REPLACE:	SIZE:	
CV PUMP SEALS	N/A: X	OK:			
	DOMEST	IC HW CONV	ERTER TANK REPLACE	D WITH UNING	SULATED CONVERTER
CV PUMP SEALS	DOMEST	i	ERTER TANK REPLACE	D WITH UNINS	SULATED CONVERTER
CV PUMP SEALS COMMENTS:	DOMEST FLOW-RI	IC HW CONV TE-TEMP MO	ERTER TANK REPLACE DEL 665		
CV PUMP SEALS	DOMEST	IC HW CONV	ERTER TANK REPLACE	ESTIMAT	SULATED CONVERTER  ED QUANTITY:  ED QUANTITY:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

### **BUILDING DATA SURVEY OBSERVATIONS**

**BLDG NAME: ENL BARRACKS W/O DIN BLDG NUMBER: 8014** 

ELECTRIC METER: N

CONDITIONED SQFT: GAS METER: Y SUSPECT ACM: N

11,549

#### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

THUR: FRI: SAT: MON: TUE: WED: SUN: PRES START: 0 0 0 0 0 0 24 24 PRES STOP: 24 24 24 24 24 0 0 0 0 0 0 0 REQ START: 24 REQ STOP: 24 24 24 24 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

BUILDING NUMBER AHU NUMBER		AHU LOCATION: THROUGHO	IT BLDG
REFRIG SYS # SRVNG A		SERVES AREA: ALL  GAREA HEATED:	100
AHU UNIT TYPE FAN C	OILS - 2 PIPE	NUMBER OF ZON	ES IF MZ UNIT: 0
CFM-HTG:	14,400	CFM-CLG: 1	4,400
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	3	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	RET/EXH FAN MTR MFG:	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s
SUPPLY FAN MTR MODEL: COMMENTS:		RET/EXH FAN MTR MODEL:	,
COILS			
Coil	Coil Type	Modulating Valve?	·
PREHEAT COIL:	NONE		
	DUAL TEMP WATER		
REHEAT COIL:		_	
HUMIDIFIER: COOLING COIL:		_	
SCHEDULE			
DAY SCHEDULE NO: SCHEDULE COMMENTS:	10	MONTH SCH	EDULE NO: 3
SIIN.	MON: THE: WED: TH	IID. EDI. ÇAT.	
SUN: PRES START: 0		UR: FRI: SAT:	
		UR: FRI: SAT:  0 0 0  24 24 24	
PRES START: 0	0 0 0	0 0 0	· · · · · · · · · · · · · · · · · · ·
PRES START: 0 PRES STOP: 24	0 0 0 24 24 24	0 0 0 24 24 24	·
PRES START:         0           PRES STOP:         24           REQ START:         0           REQ STOP:         24	0 0 0 24 24 24 0 0 0 0	0 0 0 24 24 24 0 0 0	NOV: DEC:
PRES START:         0           PRES STOP:         24           REQ START:         0           REQ STOP:         24	0         0         0           24         24         24           0         0         0           24         24         24    MAR: APR: MAY: JUN:	0 0 0 24 24 24 0 0 0 0 24 24 24 JUL: AUG: SEP: OCT:	
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	0         0         0           24         24         24           0         0         0           24         24         24    MAR: APR: MAY: JUN:	0 0 0 24 24 24 0 0 0 0 24 24 24 JUL: AUG: SEP: OCT:	NOV: DEC:
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:	0     0     0       24     24     24       0     0     0       24     24     24    MAR: APR: MAY: JUN:        □     □     □	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   CONTROLS	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SINGLE SETPOINT
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   ON:   TYPE OF CONT	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SINGLE SETPOINT  0 0
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF CONT PRESENT TEMP WINTE	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SINGLE SETPOINT
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF CONT PRESENT TEMP WINTER PRESENT TEMP WINTER U	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SINGLE SETPOINT  0 0
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:   CONTROLS  TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM	0	O O O 24 24 24 O O O 24 24 24  JUL: AUG: SEP: OCT:	SINGLE SETPOINT  0  0  0
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:    CONTROLS  TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL	0	O O O O O O O O O O O O O O O O O O O	SINGLE SETPOINT  0 0 0 0 0 TIME CLOCK: N
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: 0 ON:   TYPE OF CONT  PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM U PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL	0	O O O O O O O O O O O O O O O O O O O	SINGLE SETPOINT  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 24  MONTHS JAN: FEB: ON:    CONTROLS  TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL	0	O O O O O O O O O O O O O O O O O O O	SINGLE SETPOINT  0 0 0 0 0 TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/11/94

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILI	DING NU	MBER: [	B014					BOILER I	RM LOC	ATION:	MER		
BOILE	R UN	IIT											
		•		BLR/CO	NVER	TER SEF	RVES ARI	A OR SE	RVICE:	ALL			
sour	RCE OF E	BLDG HEA	AT					<del></del>					
	BOILE	R					<u>⊠</u> <u>C</u> (	ONVERTE	ER				
	BOILER	R TAG: 🏻			CONVERTER TAGE: CV-1								
	BOILER				CONVERTER TYPE: STM TO HW								
	FUEL	TYPE:					CON	V HT SOL	JRCE:	CENTRAL	PLANT		i
• <u>c</u>	ENTRAL	PLANT D	IRECT										
IAME	PLAT	E				%	AREA HE	ATED BY	BB RA	DIATION			0
BOILER	MFG:						BLR C	AP OUTP	UT (BTI	JH):		325,000	)
UNIT MC	DDEL:						BLR	CAP INP	UT (BTI	JH):		C	)
COMME	ENTS:												_
CHE	DULE	•											
DAYS S	CHEDUL	E NO:	10						MONT	H SECHE	OULE NO	:	3
CHEDUL	Е СОММ	ENTS:											
		SUN:	MON:	TUE	: W	ED: TI	HUR:	FRI:	SAT:				
PRES :	START:	0	0			0	0	0	0				
PRES	STOP:	24	24	. 24		24	24	24	24				
REQ:	START:	0	0		)	0	0	0	0				:
REQ	STOP:	24	24	24	<u> </u>	24	24	24	24				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	_
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$		$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	
ONTI	ROLS	<b>3</b>											_
Ţ	YPE OF	BLR CON	ITROLS:	ELECT	RIC				RESE	T CONTR	ROLS: [	N	
	OPERA	TING SE	TPOINT:			0 DEG F	or PSIG						
TYPE	OF BUR	NER CON	ITROLS:										
	CONTR	OLS COM	MENTS:										
W PL	JMP												
PUM	P TAG:	DTWP-1		PUM	P HP:		1.	5 P	UMP M	FG:			
PUMP SE	RVICE:	HW PUM	P					PUN	MP MOD	EL:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

8014

FILE:

				3014		FILE:	8014.XLS	
	AIR I		G UNIT - HVAC	UPGRADE	OBSERVA	TIONS		,
AHU NO.:	FC-1	LOCATIO	N (Rm) ALL					
AHU TYPE:	FC 2P	MFG.:			MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltng		an Coil (Indicate :	2P for 2 Pipe or	4P for 4 Pip	oe)	
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit I	Heater	IND - Ir	duction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damper	Actuator
							RP-ACT = Replace A	ctuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	NTS:	N/A		
COMMENTS:						<del></del>		
	<del></del>							
								·
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:*	RP-BD:
HEATING COIL	N/A: X	ок:	REPLACE:	SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	ок:	REPLACE:	SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
COMMENTS:	*SEVERA	L ARE LEAK	Y OR INOPERABLE				RP-ACT = Replace A	Actuator
							RP-BD = Replace Bo	ody
AHU PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:				-
AHU PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
COMMENTS:								
COMMENTS:			and analysis of					
COMMENTS: PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	FED QUANTITY			
	N/A: N/A: X	OK: X	MISSING:		FED QUANTITY			
PIPE INSULATION DUCT INSULATION								
PIPE INSULATION								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

8014

FILE:

	).	CV-1	LOCATION (RM)	MER	
BOILER/CONVERTER NO BOILER TYPE:			MFG.:		ODEL:
CONVERTER TYPE:		STM/HW	MFG.:		ODEL:
STM - Steam	STM/HW -	- Steam to Ho	t Water Conv.	HTHW/STM - H	igh Temp HW to Steam Convertor
HW - Hot Water	HTHW/HV	V - High Temp	. HW to HW Cv.	DHW - Domesti	c Hot Water Convertor
BOILER BURNER	ATMOSPI	HERIC:	POWER:	OK:	REPLACE:
COMMENTS:		· · · · · · · · · · · · · · · · · · ·			
					15.000
			Terry in a	love	
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	KEPLACE.	JOIZE.	
COMMENTS:					
BLR INSULATION	N/A: X	OK:	MISSING:	TESTIMATED Q	UANTITY:
PIPE INSULATION	N/A: X	OK:	MISSING:	IESTIMATED Q	
COMMENTS:	107.11.73				
OOMINIEIT O.					
			· **** · · ·		
HW PUMP MOTOR	N/A:	ОК: Х	REPLACE:	SIZE: 1.	5 HP MARATHON
	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS	Histor.				,
HW PUMP SEALS HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
		OK: OK:	REPLACE:	SIZE: SIZE:	
HW PUMP MOTOR	N/A:		1		
HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: VALVES I	OK: OK: OK: OK: OK: FAIR	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: VALVES I	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: VALVES I	OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: VALVES I  N/A: X  N/A: X  CONVER	OK: OK: OK: OK: OK: OK: OK: OK: TER SIZE = 8	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: VALVES I  N/A: X  N/A: X  CONVER	OK: OK: OK: OK: OK: OK: OK: OK: TER SIZE = 8	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: VALVES I  N/A: X  N/A: X  CONVER OLD DOM	OK: OK: OK: OK: OK: OK: OK: TER SIZE = 8	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	I IANTITY.
HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:  CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: VALVES I  N/A: X  N/A: X  CONVER	OK: OK: OK: OK: OK: OK: OK: OK: TER SIZE = 8	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

### **BUILDING DATA SURVEY OBSERVATIONS**

**BLDG NAME:** ENL BARRACKS W/O DIN **BLDG NUMBER: 8038** 

ELECTRIC METER: N

SUSPECT ACM: N

CONDITIONED SQFT: GAS METER: N

#### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

SUN: MON: TUE: WED: THUR: FRI: SAT: 0 0 0 0 0 0 PRES START: 24 24 24 24 24 PRES STOP: 24 24 0 0 0 REQ START: 0 0 0 0 REQ STOP: 24 24 24 24 24 24 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

**CONTROLS COMMENTS:** 

**DATE:** 10/11/94 PREPARED BY: JM/AJN

BUILDING NUMBER: 8038 AHU NUMBER: FC-1 AHU LOCATION: THROUGHOUT BLDG	
AND ROBBERT	
DEEDIG OVO # ODVOIG AUTHORISE OVI A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND A DEAL AND	
REFRIG SYS # SRVNG AHU: CV-1 SERVES AREA: ALL  % OF BLDG AREA HEATED:	100
AHU UNIT TYPE FAN COILS - 2 PIPE NUMBER OF ZONES IF MZ U	JNIT: 0
CFM-HTG: 28,800 CFM-CLG: 28,800	
MIN %OA: 0 MAX %OA: 0	
NAMEPLATE	
UNIT MFG: UNIT MODEL:	
SUPPLY FAN HP: 5 RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG: RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	<del></del>
COMMENTS: TOTAL FOR 72 FAN COILS	
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: NONE	
HEATING COIL: DUAL TEMP WATER	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	
	D:3
SCHEDULE	): <u>3</u>
SCHEDULE  DAY SCHEDULE NO: 10 MONTH SCHEDULE NO	): <u>3</u>
SCHEDULE  DAY SCHEDULE NO: 10 MONTH SCHEDULE NO SCHEDULE COMMENTS:	): <u>3</u>
SCHEDULE NO: SCHEDULE NO: SCHEDULE COMMENTS:   10	): <u>3</u>
DAY SCHEDULE NO:   10	D: 3
SCHEDULE NO: SCHEDULE NO: SCHEDULE COMMENTS:   10	2: 3
DAY SCHEDULE NO:   10	DEC:
DAY SCHEDULE NO:   10	
DAY SCHEDULE NO:   10	DEC:
DAY SCHEDULE NO:   10	DEC:
DAY SCHEDULE NO:   10	DEC:  SETPOINT  0
DAY SCHEDULE NO: 10	DEC:  SETPOINT  0 0
DAY SCHEDULE NO:	DEC:  SETPOINT  0
DAY SCHEDULE NO: 10	DEC:  SETPOINT  0 0
DAY SCHEDULE NO:   10	DEC:  SETPOINT  0  0  0  0
DAY SCHEDULE NO: 10	DEC:  SETPOINT  0 0 0 0
DAY SCHEDULE NO:	DEC:  SETPOINT  0 0 0 0 IMIT CNTRLS? [ TIME CLOCK: [
DAY SCHEDULE NO:	DEC:  SETPOINT  0 0 0 0 IMIT CNTRLS? [ TIME CLOCK: [

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDI	NG NUM	MBER: 8	3038					BOILER	RM LO	CATION:	MER		
BOILER	R UN	IT											
	•			BI R/COI	UVERTI	ER SER	VES ARE	A OR SE	RVICE	: ALL			
sourc	CE OF B	LDG HEA	<b>Λ</b> Τ ——	DE10001			TLO AIL			. , , , , , , , , , , , , , , , , , , ,			
	BOILER	3					C	ONVERT	ER				
- ,	BOILER	TAG:					CON	VERTER	TAG:	CV-1			
E	OILER	TYPE:					CON	ERTER	TYPE:	STM TO H	N		
	FUEL	TYPE:			-		CON	/ HT SOL	JRCE:	CENTRAL	PLANT		
● CE	NTRAL	PLANT D	IRECT										
NAMER	LAT	E				% /	AREA HE	ATED BY	Y BB RA	ADIATION			0
BOILER N	IFG:						BLR C	AP OUTF	UT (BT	UH):		650,000	)
UNIT MO	DEL:						BLR	CAP INP	UT (BT	UH):		(	<u>)</u>
COMME	NTS:												<del>-</del> ;
SCHED	III É												
						·····					= 110		
DAYS SO SCHEDULE		=	10						MON	TH SECH	DULE NO	<u> </u>	3
	<del></del>	SUN:	MON:	TUE:	-		IUR:	FRI:	SAT:				<del></del>
PRES S		0	0	0		0	0 =		0				
PRES : REQ S		<u>24</u> 0	= 24	24		24	24	24 0	<u>24</u> 0				:
	STOP:	24	24	24	=	24	24	24	24				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$		$\boxtimes$		$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$		
CONTR	OLS											,	
T	PE OF	BLR CON	ITROLS:	ELECT	RIC				RES	ET CONT	ROLS: [	N	
		TING SE			0	DEG F	or PSIG						
TYPE (	OF BURI	NER CON	ITROLS:										
(	CONTRO	OLS COM	MENTS:										
HW PU	MP				_								
PUMF	TAG:	DTWP-1		PUM	P HP:			5	PUMP N	MFG: US	ELECTR	IC	
PUMP SER	RVICE:	HW PUN	1P					PU	MP MOI	DEL: F80	074-01239	9L154R03	3

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY: 8038 FILE: 8038.XLS

FC-1 FC 2P	LOCATIO	N (Rm) ALL					
FC 2P		N (INIII)					
	MFG.:	<u> </u>		MODEL:			
H&V - Hea	iting & Vntltng	FC - Fa	n Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
VAV - Vari	able Air Vol.	RHT - I	Reheat System				
UH - Unit I	Heater	IND - Ir	duction System				
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
						DPR-ACT = Damper	Actuator
		***************************************				RP-ACT = Replace	Actuator
N/A:	OK: X	REPLACE:	SIZE:				
OK: X	TREPLACE	FAN BEARINGS:	ICOMMEN	NTS:		<del></del>	<del></del>
			ICOMMEN	JTS:	N/A		<del></del>
<u> </u>	TIVEL BYOL		JOOIVINE	110.	11//		
Thur,	Toy v	10501105	Journ	IONET MAN	ارمار	155 167 1	Jon on
!1			1		II.		RP-BD:
			1		11	1	RP-BD:
							RP-BD:
			SIZE.	CIVILVE	<u> </u>		
SEVERA	L ARE LEAN	OR INOPERABLE					
						Ar-bb - Nepiace b	y
IN/A·	IUK: X	REDIACE:	ISIZE				
	1		1				
	Jon. A	THE DIVE.	OIZE.				
16x1/A.	IOV. V	IMICOMO	Inotalia -	ED OLIANTITY			
_N/A: X	lok:	MISSING:	<u>  ESTIMAT</u>	ED QUANTITY:			
	N/A: X	N/A: X	N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE:  OK: X REPLACE: N/A: X OK: COMMENTS: OK: REPLACE: N/A: X OK: COMMENTS: OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE: N/A: OK: X REPLACE:	N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE:  OK: X REPLACE FAN BEARINGS: COMMENTO: OK: X REPLACE: COMMENTO: OK: REPLACE: COMMENTO: OK: REPLACE: COMMENTO: OK: REPLACE: COMMENTO: OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: X REPLACE: SIZE:	N/A: X OK: REPLACE: SIZE: DPR-ACT N/A: X OK: REPLACE: SIZE: DPR-ACT N/A: X OK: REPLACE: SIZE: DPR-ACT N/A: X OK: REPLACE: SIZE: DPR-ACT N/A: X OK: REPLACE: SIZE: DPR-ACT N/A: X OK: REPLACE: SIZE: DPR-ACT N/A: X OK: REPLACE: SIZE: DPR-ACT N/A: X OK: REPLACE: SIZE: DPR-ACT    N/A: X OK: REPLACE: SIZE: DPR-ACT   N/A: X OK: REPLACE: COMMENTS: COMMENTS:     OK: X REPLACE: COMMENTS:     OK: REPLACE FAN BEARINGS: COMMENTS:     OK: REPLACE: COMMENTS:     OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: CNTLVLV     N/A: X OK: REPLACE: SIZE: SIZE: CNTLVLV     N/A: OK: X REPLACE: SIZE: SIZE: CNTLVLV     N/A: OK: X REPLACE: SIZE: SIZE: SIZE: CNTLVLV     N/A: OK: X REPLACE: SIZE: SIZE: SIZE: CNTLVLV     N/A: OK: X REPLACE: SIZE:  N/A: X	N/A: X	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG:

8038

FILE:

			VERTER - HVAC		
BOILER/CONVERTER NO		CV-1	LOCATION (RM)	MER	<b>7</b> 1
BOILER TYPE:		071171111	MFG.:	MODI	
CONVERTER TYPE:	0714004	STM/HW	MFG.:	MODI	Temp HW to Steam Convertor
STM - Steam			t Water Conv.	DHW - Domestic H	
HW - Hot Water	ATMOSP		D. HW to HW Cv.	OK:	IREPLACE:
BOILER BURNER			POWER:	JUN.	REPLACE.
COMMENTS:	LIKE 8052				
		****			
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUAI	
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUAI	NTITY:
COMMENTS:		HP DUAL TEN			
	CWS & C	WR NEW INS	ULATION ~ 10' @ 4"		
				· · · · · · · · · · · · · · · · · · ·	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE: SIZE:	
HW PUMP SEALS	N/A: X		K. PIPING ON CONVER		ODED
COMMENTS:	CONTRO	L VALVES OF	R. PIPING ON CONVER	TER SEVERELT CORR	ODED.
					- Maria
CV PUMP MOTOR	N/A:	OK: X	REPLACE:	ISIZE:	
CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:		1 - 1 - 1			
COMMETTO.					
	_				
CV INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUA	NTITY:
	N/A:	OK:	MISSING:	ESTIMATED QUA	NTITY:
CV PIPE INSUL.	HIA/A.	JOIN.	princente.		

# EMC ENGINEERS, INC. EMC NO: 1406-001 PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION **DATE**: 10/11/94 CLIENT CONTRACT NO: DACA 01-94-D-0033 PREPARED BY: JM/AJN LOCATION: FT. RILEY, KS **BUILDING DATA SURVEY OBSERVATIONS** BLDG NAME: ENL BARRACKS W/O DIN **BLDG NUMBER: 8040** CONDITIONED SQFT: 11,549 ELECTRIC METER: N GAS METER: N SUSPECT ACM: N **BUILDING OCCUPANCY SCHEDULE** BUILDING SCHDULE NO:

**REMARKS:** 

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

BUILDING NUMBER: AHU NUMBER:		AHU LOCATION	: THROUGHO	OUT BLDG	
REFRIG SYS # SRVNG AHU		SERVES AREA: LDG AREA HEATED:	ALL	10	00
AHU UNIT TYPE FAN CO	ILS - 2 PIPE	NU	MBER OF ZON	ES IF MZ UNIT:	0
CFM-HTG: MIN %OA:	14,400 0	CFM-CLG: MAX %OA:		14,400	
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:	3			0	
Coil	Coil Type	Modulating V	/alve?		
HEATING COIL: REHEAT COIL: HUMIDIFIER:	NONE DUAL TEMP WATER NONE NONE NONE				
DAY SCHEDULE NO: SCHEDULE COMMENTS:	10		MONTH SCH	EDULE NO:	3
SUN:   I	MON:         TUE:         WED:           0         0         0           24         24         24           0         0         0           24         24         24	THUR: FRI: S  0 0 0  24 24  0 0  24 24  24 24	6AT: 0 24 0 24		:
ON:	AR: APR: MAY: JU		SEP: OCT:	NOV: DEC:	
CONTROLS			<u></u>		
TYPE OF CONTR  PRESENT TEMP WINTR OF  PRESENT TEMP SUM OF  PRESENT TEMP SUM UNO  MIN OA DMPR CONTROL:  MAX OA DMPR CONTROL:  RET AIR DMPR CONTROL:  EXH AIR DMPR CONTROL:	0CC: 0 0CC: 0	HOT I COLD I MIXE OTHER SETPOI OTHER SETP PR CONTROL: N DB CONTROL: N	OINT DEG F:	DEMAND LIMIT OF TIME	0 0 0 0 0 CNTRLS? N
OTHER CONTROLS DE CONTROLS COMME					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/11/94

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUM	BER: 80	40	·			BOILER RM L	OCATION:	MER		
BOILER UNI	T									
	-	E	BLR/CON	VERTER S	ERVES ARE	A OR SERVIC	E: ALL			
SOURCE OF BI	LDG HEAT									
BOILER	<u> </u>				<u> </u>	ONVERTER				
BOILER	TAG:				CON	VERTER TAG	: CV-1			_
BOILER T	YPE:					ERTER TYPE	ļ			
FUEL T	YPE:				CON	/ HT SOURCE	: STEAM FF	OM CENTF	RAL PLANT	
© CENTRAL F	PLANT DIF	RECT								
NAMEPLAT	E				% AREA HE	ATED BY BB	RADIATION	:		0
BOILER MFG:					BLR C	AP OUTPUT (E	STUH):		325,000	
UNIT MODEL:				_	BLR	CAP INPUT (E	BTUH):		0_	
COMMENTS:									,	
SCHEDULE			· · · · · · · · · · · · · · · · · · ·							
DAYS SCHEDULE	E NO:	10				MO	NTH SECHI	DULE NO:	:	3
SCHEDULE COMME	NTS:									_
	SUN:	MON:	TUE:	WED:	THUR:	FRI: SAT	:			-
PRES START:	0	0	0	0	0	0 (	<u></u>			
PRES STOP:	24	24	24	24	24	24 24	4			
REQ START:	0	0	0	0	0		<u> </u>			
REQ STOP:	24	24	24	24	24	24 24	4			_
MONTHS JAN:	FEB:	MAR:	APR: I	MAY: JU	JN: JUL:	AUG: SE	P: OCT:	NOV:	DEC:	-
ON:	$\boxtimes$	$\boxtimes$					$\boxtimes$		$\boxtimes$	<u>:</u>
CONTROLS										
TYPE OF E	BLR CONT	ROLS:	ELECTR	IC		RE	SET CONT	ROLS:	N	
OPERA	TING SET	POINT:		0 DE	G F or PSIG			_		
TYPE OF BURN	NER CONT	ROLS:								
CONTRO	LS COM	MENTS:								
HW PUMP										
PUMP TAG:	DTWP-1		PUMP	P HP:	1	5 PUMF	MFG:			
PUMP SERVICE:	DUAL TEN	IP PUMP	)			PUMP M	ODEL:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

8040

FILE:

HU NO.:	FC-1	LOCATIO	IG UNIT - HVAC					
HU TYPE:	FC-1	MFG.:	MIL ALL	<del></del>	MODEL:			<u> </u>
SZ - Single Zone		ating & Vntltng	FC - F	an Coil (Indicate	l l	4P for 4 Pir	<u></u>	
MZ - Mulitzone		iable Air Vol.		Reheat System	21 101 2 1 1pe 01	41 101 4 1 IJ	) <del>(</del> )	
DD - Dual Duct	UH - Unit I			nduction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	IRP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	- OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:					D: 1(7(0)		DPR-ACT = Damper	Actuator
JOHN LIVIO.							RP-ACT = Replace A	
							At -Alot # Nepidoe /	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
					T			
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
INLET VANES	N/A: X	lok:	COMMENTS:	1001111121				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
		IIVEI DAGE			N 1 O.	IN/A		
				1002	<del></del>			
			***					
COMMENTS:					CNITLVLV	JIOK:	IRD ACT:*	Ipp an
COMMENTS:  COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:*	
COMMENTS:  COOLING COIL HEATING COIL	N/A: N/A: X	ОК: X   ОК:	REPLACE:	SIZE: SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A:	OK: X	REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD:
	N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	ок:	RP- ACT: RP- ACT: RP- ACT:	RP-BD:
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL	N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL  HEATING COIL  PREHEAT COIL  REHEAT COIL  COMMENTS:	N/A: N/A: X N/A: X N/A: X *SEVERA	OK: X OK: OK: OK: OK: LARE LEAK	REPLACE: REPLACE: REPLACE: REPLACE: OR INOPERABLE	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X N/A: X *SEVERA	OK: X OK: OK: OK: LARE LEAKY	REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X N/A: X *SEVERA	OK: X OK: OK: OK: LARE LEAKY	REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X N/A: X *SEVERA	OK: X OK: OK: OK: LARE LEAKY	REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: X N/A: X N/A: X *SEVERA	OK: X OK: OK: OK: LARE LEAKY OK: X	REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE  REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	ОК: ОК: ОК:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COMMENTS:  COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:  AHU PUMP MOTOR	N/A: N/A: X N/A: X N/A: X *SEVERA	OK: X OK: OK: OK: LARE LEAKY	REPLACE: REPLACE: REPLACE: REPLACE: Y OR INOPERABLE	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	ОК: ОК: ОК:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

8040

FILE:

	BOILE	R & CON	VERTER - HVAC	UPGRADE OBSE	RVATIONS
BOILER/CONVERTER NO.	•	CV-1	LOCATION (RM)	MER	
BOILER TYPE:			MFG.:	MODE	
CONVERTER TYPE:		STM/HW	MFG.:	MODE	
STM - Steam			t Water Conv.	,	Temp HW to Steam Convertor
HW - Hot Water			. HW to HW Cv.	DHW - Domestic Ho	
BOILER BURNER	ATMOSPH		POWER:	OK:	REPLACE:
COMMENTS:	LIKE 8048				
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
	· · · · · · · · · · · · · · · · · · ·				
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUAN	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUAN	ITITY:
	V	lov	Toppy Aor	10175	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	· · · · · · · · · · · · · · · · · · ·
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X		(. DUAL TEMP = CENT		
COMMENTS:	CONTROL	_ VALVES UP	. DUAL TEMP = CENT	URT Z FP.	
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
OV INCLUATION	UNITA:	TOV. V	IMICCINIC:	IESTIMATED QUAN	JTITV·
CV INSULATION	N/A:	OK: X	MISSING:	IESTIMATED QUAN	· · · · · · · · · · · · · · · · · · ·
CV PIPE INSUL.	N/A:	OK: X	MISSING:	IESTIMATED GOAD	VIIII.
COMMENTS:	NO INSUL	ATION ON F	UMP		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/JM

#### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NAME: ENL BARRACKS W/O DIN BLDG NUMBER: 8042

ELECTRIC METER: N GAS METER: N

SUSPECT ACM: N

CONDITIONED SQFT:

22,700

**BUILDING OCCUPANCY SCHEDULE** 

BUILDING SCHDULE NO: 10

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	0	0	0	0	0	0
REQ STOP:	24	24	24	24	24	24	24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/11/94

LOCATION: FT. RILEY, KS PREPARED BY: AJN/JM

BUILDING NUMBER		A1111 00 17 10 11 THE	
AHU NUMBER: FC-1		AHU LOCATION: THR	OUGHOUT BLDG
REFRIG SYS # SRVNG AI	HU: CV-1	SERVES AREA: ALL	
	% OF B	BLDG AREA HEATED:	100
AHU UNIT TYPE FAN C	OILS - 2 PIPE	NUMBER	OF ZONES IF MZ UNIT: 0
CFM-HTG:	28,800	CFM-CLG:	28,800
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:		UNIT MODI	EL:
SUPPLY FAN HP:	5	RET/EXH FAN I	IP: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MI	FG:
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODI	<b>EL:</b>
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	DUAL TEMP WATER		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	10	MON'	TH SCHEDULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	ï
REQ START: 0	0 0 0	0 0 0	•
REQ STOP: 24	24 24 24	24 24 24	:
	MAR: APR: MAY: JU	UN: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT	TYPE: SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC:	HOT DECK	DEG F: 0
PRESENT TEMP WINTR U		COLD DECK I	DEG F: 0
DDECENT TEMP OU		MIXED AIR I	
PRESENT TEMP SUM U			
MIN OA DMPR CONTROL	.: N MIXED AIR DA	MPR CONTROL: N IMPLE	MENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: N ECONOMIZER DB CONTROL: N TIME CLOCK:			
	.: N FCONOMIZED	DR COMPROFER	I I I I I I I I I I I I I I I I I I I
		<del></del>	
RET AIR DMPR CONTROL EXH AIR DMPR CONTROL	.: N ECONOMIZER	WB CONTROL: N	TIME CLOCK: N  TIME CLOCK OPERATIONAL? N
RET AIR DMPR CONTROL	ECONOMIZER	<del></del>	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE**: 10/11/94

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/JM

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BLR/CONVERTER SERVES AREA OR SERVICE: ALL	
SOURCE OF BLDG HEAT	
○ □ BOILER   □ CONVERTER	
BOILER TAG: CV-1	
BOILER TYPE: CONVERTER TYPE: STM TO HW	
FUEL TYPE: CONV HT SOURCE: CENTRAL PLANT	
CENTRAL PLANT DIRECT	
NAMEPLATE % AREA HEATED BY BB RADIATION:	0
BOILER MFG: BLR CAP OUTPUT (BTUH): 650	,000
UNIT MODEL: BLR CAP INPUT (BTUH):	0
COMMENTS:	
CONTRICTOR 13.	
SCHEDULE	
DAYS SCHEDULE NO: 10 MONTH SECHDULE NO:	3
DAYS SCHEDULE NO: 10 MONTH SECHDULE NO: SCHEDULE COMMENTS:	
SUN:         MON:         TUE:         WED:         THUR:         FRI:         SAT:           PRES START:         0         0         0         0         0         0	
PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24	
REQ START: 0 0 0 0 0 0 0 0	
REQ STOP: 24 24 24 24 24 24 24 24	:
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC	<b>:</b> :
ON: N N N N N N N N N N N N N N N N N N	:
CONTROLS	
TYPE OF BUR CONTROLS: FLECTRIC RESET CONTROLS: N	
TYPE OF BLR CONTROLS: ELECTRIC RESET CONTROLS: N	
OPERATING SETPOINT: 0 DEG F or PSIG	
	1
OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS:  CONTROLS COMMENTS:	
OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 7 Nov-94

CHECKED BY:

CWW AJN

BLDG: **8042** FILE: 8042.XLS

	AIR H	ANDLIN	G UNIT - HVAC	UPGRADE	OBSERVA	TIONS		
AHU NO.:	FC-1	LOCATIO	N (Rm) ALL			***************************************		
AHU TYPE:	FC 2P	MFG.:			MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltng	FC-F	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	e)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - I	nduction System				
D.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	3-WAY VA	ALVES ON FO	'S IN HALLWAYS & DA	YROOMS. 2 FO	C'S		DPR-ACT = Damp	er Actuator
	PER HALI	_WAY; 2 FC'S	PER DAYROOM				RP-ACT = Replace	e Actuator
	16					<del>,</del>		
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:			· · · · · · · · · · · · · · · · · · ·
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				<del></del>
NLET VANES	N/A: X	OK:	COMMENTS:	Joonna	110.			
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	IT Q.	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:	JON.	INCFEACE		COMMEN	V10.	IN/A	····	-
COMMENTS.								
		<del></del>						
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	NONE	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	DUAL TE	MP. MANUAL	BALANCING VALVES	(NO CONTROL	VALVES)		RP-ACT = Replace	e Actuator
	IN ROOM	S. 3-SPEED F	AN CONTROL FOR A	LL ROOMS. TYP	PICAL FOR		RP-BD = Replace	Body
	BLDGS. II	N THIS AREA	. FANS DO NOT SHUT	T-OFF AFTER RO	OOMS			
	REACH D	ESIRED TEM	PERATURE.					
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS								
AHU PUMP SEALS COMMENTS:								
COMMENTS:		Tol.	Turonic					
	N/A:	OK: X	MISSING:		ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

8042

FILE: 8042.XLS

	BOILE	ER & CON	VERTER - HVAC	<b>UPGRADE OBSERVAT</b>	TIONS
BOILER/CONVERTER NO	).	CV-1	LOCATION (RM)	MER	
BOILER TYPE:			MFG.:	MODEL:	
CONVERTER TYPE:		STM/HW	MFG.:	MODEL:	
STM - Steam			ot Water Conv.	HTHW/STM - High Temp HW	
HW - Hot Water			p. HW to HW Cv.	DHW - Domestic Hot Water 0	
BOILER BURNER	ATMOSF	HERIC:	POWER:	OK: R	EPLACE:
COMMENTS:					
					*******
	16	Tou	Toron Age	louze .	
BLR PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE: SIZE:	
BLR PUMP SEALS	N/A:	OK:	REPLACE:	SIZE	
COMMENTS:					
BLR INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:	
PIPE INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:			BALDOR, 5 HP.	POTIMIZATED GOZATITA	
COMINICIA 19.		)L VALVES - (		1.400	
	CONTING	A VALVES - (			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:					
CV PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: 5 HP BALDOR	
CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:	OUTSID	E AIR SENSO	R		
CV INSULATION	N/A:	ОК:	MISSING:	ESTIMATED QUANTITY:	FAIR
CV PIPE INSUL.	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:	FAIR
COMMENTS:					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

**BUILDING DATA SURVEY OBSERVATIONS** 

**BLDG NUMBER: 8048** 

GAS METER: N SUSPECT ACM: N

BLDG NAME: ENL BARRACKS W/O DIN

ELECTRIC METER: N

CONDITIONED SQFT:

11,549

**BUILDING OCCUPANCY SCHEDULE** 

BUILDING SCHDULE NO: 10

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	0	0	0	0	0	0
REQ STOP:	24	24	24	24	24	24	24

**REMARKS:** 

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

**DATE:** 10/11/94 PREPARED BY: JM/AJN

# AIR HANDLING UNIT SURVEY OBSERVATIONS

						<del> </del>			
	BUILDING NUMBER	<del></del>	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	A1111 00ATION	TUDOUGUOU	T DI DO			
	AHU NUMBEI			AHU LOCATION		I BLUG			
	REFRIG SYS # SRVNG A	HU: <u>CV-1</u>	% OF BLD	SERVES AREA: G AREA HEATED:	ALL	100			
Г		-		G ARLA HEATED.		100	_		
	AHU UNIT TYPE FAN C	OILS - 2 PIPE		NU	NUMBER OF ZONES IF MZ UNIT:				
	CFM-HTG:		14,400	CFM-CLG:	14	,400			
	MIN %OA:		0	MAX %OA:	t	0			
N	IAMEPLATE								
	UNIT MFG:			UNI	IT MODEL:				
	SUPPLY FAN HP:		3		H FAN HP:	0			
	SUPPLY FAN MTR MFG:			RET/EXH FAN	<del>,</del>				
	SUPPLY FAN MTR MODEL: COMMENTS:			RET/EXH FAN MT	R MODEL:				
	COMMENTS.	<del>.</del>							
<u></u>	OILS								
	Coil	Coil 1	Гуре	Modulating	Valve?				
	PREHEAT COIL:								
	HEATING COIL:		WATER	¤					
	REHEAT COIL: HUMIDIFIER:								
	COOLING COIL:	<u> </u>		— H					
S	CHEDULE			. <u></u>					
_	DAY SCHEDULE NO:	10			MONTH SCHE	NU E NO			
	SCHEDULE COMMENTS:				MONTH SCHEL	JOLE NO.	3		
	SUN:	MON: TI	JE: WED: TH	HUR: FRI:	SAT:		<del></del>		
	PRES START: 0	0	0 0	0 0	0				
	PRES STOP: 24	24	24 24	24 24	24				
	REQ START: 0	0	0 0	0 0	0				
	REQ STOP: 24	24	24 24	24 24	24		· ·		
N	MONTHS JAN: FEB:	MAR: APR	: MAY: JUN:	JUL: AUG:	SEP: OCT:	NOV: DEC:	-		
	ON:								
C	ONTROLS								
	TYPE OF CONT	ROLS: ELE	CTRIC		-	SINGLE SETPOINT			
	PRESENT TEMP WINT	R OCC:	0		DECK DEG F:	0			
	PRESENT TEMP WINTR U	NOCC:	0		DECK DEG F:	0			
	PRESENT TEMP SUI	M OCC:	0	OTHER SETPO					
	PRESENT TEMP SUM U	NOCC:	0	OTHER SET	POINT DEG F:	0			
	MIN OA DMPR CONTROL	.: N	MIXED AIR DMPR	CONTROL: N	IMPLEMENT DE	EMAND LIMIT CNTF	RLS? N		
	MAX OA DMPR CONTROL	_: N	ECONOMIZER DB	CONTROL: N		TIME CLO	OCK: N		
	RET AIR DMPR CONTROL	_: N E	ECONOMIZER WB	CONTROL: N	TIME C	LOCK OPERATION	IAL? N		
	EXH AIR DMPR CONTROL	.: N							
	OTHER CONTROLS E								
	CONTROLS COM								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/11/94

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER:	8048			BOILER F	RM LO	CATION:	MER		
BOILER UNIT									
		BLR/CONVER	TER SERVES	AREA OR SE	RVICE	: ALL			
SOURCE OF BLDG HE	AT								
BOILER				CONVERTE					
BOILER TAG:				CONVERTER		CV-1			<del>_</del> ·
BOILER TYPE:		CONVERTER TYPE: STM TO HW  CONV HT SOURCE: CENTRAL PLANT							<del></del>
FUEL TYPE:						CENTRALI	LANI		
© CENTRAL PLANT	DIRECT								
NAMEPLATE			% ARE	A HEATED BY	BB RA	ADIATION:			0
BOILER MFG:			В	LR CAP OUTP	UT (BT	UH):		325,000	-
UNIT MODEL:				BLR CAP INP	UT (BT	UH):		0	-
COMMENTS:					· · · · · · · · · · · · · · · · · · ·				-
SCHEDULE									i i
CHEDOLL									
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	10				MONT	TH SECHD	ULE NO:		3
PRES START: 0			ED: THUR	: FRI:	SAT:				_
PRES START: 0 PRES STOP: 24		24	24 24		24				
REQ START: 0		0		0	0				
REQ STOP: 24	24	24	24 24	1 24	24				:
MONTHS JAN: FEB:	MAR:	APR: MAY	: JUN: .	JUL: AUG:	SEP:	OCT:	NOV:	DEC:	
ON:			$\boxtimes$		$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTROLS									
TYPE OF BLR CO	NTROLS:	ELECTRIC			RES	ET CONT	ROLS: [	N	
OPERATING S			0 DEG F or I	PSIG					
TYPE OF BURNER CO	NTROLS:			١					
CONTROLS CO	MMENTS:								
HW PUMP									
PUMP TAG: DTWP-	1	PUMP HP:		1.5 F	PUMP N	/IFG:			
PUMP SERVICE: DUAL 1		<b>5</b>		PU	MP MOI	DEL:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: AJN NLA

BLDG:

8048

FILE:

Coil (Indicate cheat System fuction System SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT		RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: PP- ACT:  DPR-ACT = Damper A RP-ACT = Replace Ac	
eheat System fuction System SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	2P for 2 Pipe or 4P  DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:  RP- ACT:	
eheat System fuction System SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	2P for 2 Pipe or 4P  DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:  RP- ACT:	
eheat System fuction System SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:  RP- ACT:	
SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:  RP- ACT:	
SIZE: SIZE: SIZE: SIZE: SIZE:	DPR-ACT DPR-ACT DPR-ACT DPR-ACT	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:  RP- ACT:	
SIZE: SIZE: SIZE: SIZE:	DPR-ACT DPR-ACT DPR-ACT	OK: OK:	RP- ACT: RP- ACT: RP- ACT:  DPR-ACT = Damper A	
SIZE: SIZE: SIZE:	DPR-ACT DPR-ACT	OK:	RP- ACT: RP- ACT:  DPR-ACT = Damper A	
SIZE:  SIZE:  COMMEN	DPR-ACT		RP- ACT:  DPR-ACT = Damper A	
SIZE:		OK:	DPR-ACT = Damper A	
COMME	NTS:			
COMME	NTS		RP-ACT = Replace Ac	otuator
COMME	NTS			<del></del>
COMME	NTS:			
	NTS:			
	NTS:			
	VTS:			
COMME	110.			
COMMENTS:				
COMME	NTS:	N/A		
REPLACE FAN BEARINGS: COMMENTS: N/A REPLACE: COMMENTS: N/A				
SIZE:	CNTLVLV	OK:	RP- ACT:*	RP-BD:
SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
SIZE:		OK:	RP- ACT:	RP-BD:
SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
			RP-ACT = Replace Ac	duator
			RP-BD = Replace Bod	ly
SIZE:				
SIZE:				
		·		
	TED QUANTITY:			
		ESTIMATED QUANTITY:  ESTIMATED QUANTITY:		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

8048

FILE:

	BOILE	R & CON	VERTER - HVAC	UPGRADE OF	BSERVATIONS
BOILER/CONVERTER NO	),	CV-1	LOCATION (RM)	MER	
BOILER TYPE:			MFG.: OLD D		ODEL: HE-2081-M1
CONVERTER TYPE:		STM\HW	MFG.:		ODEL:
STM - Steam		- Steam to Hot			ligh Temp HW to Steam Convertor
HW - Hot Water			. HW to HW Cv.		ic Hot Water Convertor
BOILER BURNER	ATMOSPI		POWER:	OK:	REPLACE:
COMMENTS:	8" X 45' L	ONG			
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:	_1			1	
		******			
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED Q	
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED Q	UANTITY:
COMMENTS:					
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
OV DUMP HOTOD	Marra .	Tok Y	IDEDLACE	ICIZE: 4	1/2 UD MADATUON ELECTRIC
CV PUMP MOTOR	N/A:	OK: X	REPLACE:		1/2 HP MARATHON ELECTRIC
CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:					
CV INCLEATION	7[NI/A :	OK: X	IMISSING:	IESTIMATED C	NIANITITY:
CV INSULATION	N/A:			ESTIMATED C	
CV PIPE INSUL.	N/A:	OK: X	MISSING:	IESTIMATED C	IUAINTITT.
COMMENTS:					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

## **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 8050 BLDG NAME: ENL BARRACKS W/O DIN

ELECTRIC METER: N

GAS METER: N
SUSPECT ACM: N

CONDITIONED SQFT: 11,549

#### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	0	0	0	0	0	0
REQ STOP:	24	24	24	24	24	24	24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/11/94

LOCATION: FT. RILEY, KS PREPARED BY: JM/AJN

## AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER: AHU NUMBER:	8050 FC-1	AHU LOCATION: THROUGH	OUT BLDG
		AND ECOATION: THROUGH	
REFRIG SYS # SRVNG AHU		SERVES AREA: ALL	
	% OF BLDG	AREA HEATED:	100
AHU UNIT TYPE FAN COI	LS - 2 PIPE	NUMBER OF ZO	NES IF MZ UNIT: 0
CFM-HTG:	14,400	CFM-CLG:	14,400
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	3	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	ALL LAND NO. II. CHILDREN WAS TAVEN TO THE TANK OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PA
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:	NAME OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS O		;
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
	DUAL TEMP WATER		
	IONE	─	
HUMIDIFIER: N	IONE	<del>-</del>	
COOLING COIL:	ONE		
SCHEDULE			
DAY SCHEDULE NO:	10	MONTH SC	HEDULE NO: 3
SCHEDULE COMMENTS:			
SUN: N	MON: TUE: WED: TH	UR: FRI: SAT:	
PRES START: 0	0 0 0 0	0 0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	$\frac{27}{0} = \frac{27}{0} = \frac{27}{0} = \frac{27}{0}$	$\frac{24}{0} = \frac{24}{0} = \frac{27}{0}$	:
REQ STOP: 24	$\frac{3}{24}$ $\frac{3}{24}$ $\frac{3}{24}$ $\frac{3}{24}$	24 24 24	!
	27 27		:
	AR: APR: MAY: JUN:	JUL: AUG: SEP: OCT	: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTRO	OLS: ELECTRIC	THERMOSTAT TYPE	
PRESENT TEMP WINTR C	OCC: 0	HOT DECK DEG F	
PRESENT TEMP WINTR UNC		COLD DECK DEG F MIXED AIR DEG F	
PRESENT TEMP SUM C	occ: 0	OTHER SETPOINT DESCRIP	
PRESENT TEMP SUM UNC		OTHER SETPOINT DEG F:	
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: N IMPLEMENT	DEMAND LIMIT CHTRLS?
MAX OA DMPR CONTROL:	N ECONOMIZER DB		TIME CLOCK:
RET AIR DMPR CONTROL:	N ECONOMIZER WB	<del>  </del>	E CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL:	N ECONOMIZER WB	30.1.1.0L. [11]	= 0100K OF LIVERIONAL!
OTHER CONTROLS DES	CR:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/11/94

PREPARED BY: JM/AJN

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUME	BER: 80	50				BOILER RM LO	CATION:	MER		
BOILER UNI	Τ									
SOURCE OF BL	DG HFA		BLR/CON	VERTER SE	RVES AR	A OR SERVIC	E: ALL			
	DOTILA					NIVED TED				
BOILER						ONVERTER	0)(4			
BOILER T					<del></del> :	VERTER TAG: VERTER TYPE:		A i		
BOILER TY					4 1	HT SOURCE				
© CENTRAL PI	LANT DI	RECT								
NAMEPLATE				9,	6 AREA HE	ATED BY BB I	RADIATION			0
BOILER MFG:					BLR C	AP OUTPUT (E	STUH):		325,000	=
UNIT MODEL:					BLR	CAP INPUT (E	TUH):		0	
COMMENTS:										5 1
CHEDULE										-
CHEDULE										
DAYS SCHEDULE SCHEDULE COMME	=	10				MO	NTH SECHE	DULE NO:		3
	SUN:	MON:	TUE:		THUR:	FRI: SAT	-			
PRES START:	0	0	0	24	24	$\frac{0}{24} = \frac{0}{24}$	=			
PRES STOP:	<u>24</u> 0	24 0	24	0	0	0 (	=			
REQ START:	24	24	24	24	24	24 24	=			
MONTHS JAN:	FEB:	MAR:	APR: I	MAY: JU	N: JUL:	AUG: SE	P: OCT:	NOV:	DEC:	_
ON:	$\boxtimes$	$\boxtimes$	X		$\boxtimes$				$\boxtimes$	
CONTROLS	- 12					411.19				
TYPE OF B	LR CON	TROLS:	ELECTR	IC		RE	SET CONT	ROLS: [	N	
OPERAT	ING SET	POINT:		0 DEG	F or PSIG					
TYPE OF BURN	ER CON	TROLS:								
CONTROL	LS COMI	MENTS:								
HW PUMP										
PUMP TAG:	OTWP-1		PUME	P HP:	1	.5 PUMF	MFG:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 7 Nov-94

CHECKED BY:

AJN AJN

BLDG:

8050

FILE: 8050.XLS

FC-1	LOCATIO	V(Rm) ALL					
		Y (MIII) ALL					
FC 2P	MFG.:			MODEL:			
		1	•	2P for 2 Pipe or	4P for 4 Pip	oe)	
		the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	•				
	l				III		
i						1	
	· ·	1				4	
N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
						DPR-ACT = Damper	Actuator
						RP-ACT = Replace	Actuator
N/A:	OK: X	REPLACE:	SIZE:				
OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			·
		_1	ICOMMEN	TS ⁻	N/A		
	THE BIOL		JOOIVIIVIEIV	110.	IN/A	-	
Thu.	Toy v	[DED] + 0E	Journ Louis Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee Comm		Tax.		
JL	1						RP-BD:
							RP-BD:
					11		RP-BD:
			SIZE:	CNTLVLV	JOK:	RP- ACT:	RP-BD:
*SEVERAI	L ARE LEAKY	OR INOPERABLE				RP-ACT = Replace A	Actuator
						RP-BD = Replace Bo	ody
N/A:	ОК: Х	REPLACE:	SIZE:		w		
N/A:	OK: X	REPLACE:	SIZE:				
-			***************************************				
N/A:	ОК: Х	MISSING:	ESTIMATI	ED QUANTITY:			
N/A: X	OK:	MISSING:	IESTIMATI	D QUANTITY:	*		
			1-2	· · · · · · · · · · · · · · · · · ·	<del> </del>		***************************************
	N/A: X	H&V - Heating & Vntltng VAV - Variable Air Vol. UH - Unit Heater    N/A: X	H&V - Heating & Vntltng.  VAV - Variable Air Vol.  UH - Unit Heater  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  OK: X REPLACE:  OK: X REPLACE:  N/A: X OK: COMMENTS:  OK: REPLACE FAN BEARINGS:  OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: X OK: REPLACE:  N/A: OK: X REPLACE:  N/A: OK: X REPLACE:  N/A: OK: X REPLACE:  N/A: OK: X REPLACE:  N/A: OK: X REPLACE:	H&V - Heating & Vntling.   FC - Fan Coil (Indicate   VAV - Variable Air Vol.   RHT - Reheat System UH - Unit Heater   IND - Induction System   N/A: X   OK:   REPLACE:   SIZE:   SIZE:   N/A: X   OK:   REPLACE:   SIZE:   N/A:	H&V - Heating & Vntling.   FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe vAV - Variable Air Vol.   RHT - Reheat System     WAV - Variable Air Vol.   RHT - Reheat System     WAV - Variable Air Vol.   RHT - Reheat System     WAV - Variable Air Vol.   REPLACE:   SIZE:   DPR-ACT   OK:     N/A: X   OK:   REPLACE:   SIZE:   DPR-ACT   OK:     N/A:   OK:   X   REPLACE:   SIZE:   DPR-ACT   OK:     N/A:   OK:   X   REPLACE:   SIZE:   COMMENTS:     OK:   REPLACE:   COMMENTS:   COMMENTS:   N/A     OK:   REPLACE:   COMMENTS:   N/A     OK:   REPLACE:   COMMENTS:   N/A     OK:   REPLACE:   SIZE:   CNTLVLV   OK:     N/A:   OK:   REPLACE:   SIZE:   SIZE:   CNTLVLV   OK:     N/A:   OK:   REPLACE:   SIZE:   SIZE:   CNTLVLV   OK:     N/A:   OK:   REPLACE:   SIZE:   SIZ	H&V - Heating & Vntiting.   FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe)	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

4 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

8050

FILE: 8050.XLS

	CV-1	TLOCATION (BM)	
	011	LOCATION (RM)	MER
		MFG.:	MODEL:
	STM/HW	MFG.:	MODEL:
			HTHW/STM - High Temp HW to Steam Convertor
			DHW - Domestic Hot Water Convertor
ATMOSPH	HERIC:	POWER:	OK: REPLACE:
76.7. 37	Tou	IDED! ACE.	ISIZE:
			SIZE:
IN/A: X	JOK:	REPLACE:	SIZE.
	-		
N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
N/A: X	OK:	REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:
STEAM C	ONTROL VAL	VE OK	
			SIZE: 1.5 CENTURY
			SIZE:
CWS MIS	SING ~ 10' OF	4" INSULATION	
IN/A:	lok:	IMISSING: X	ESTIMATED QUANTITY: 8"X2"
			ESTIMATED QUANTITY:
<u> </u>	10/	1	
	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	STM/HW - Steam to Hot HTHW/HW - High Temp  ATMOSPHERIC:  N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK	STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv.  ATMOSPHERIC: POWER:  N/A: X OK: REPLACE: N/A: X OK: MISSING:  N/A: X OK: MISSING:  N/A: X OK: MISSING:  N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: CWS MISSING ~ 10' OF 4" INSULATION

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

#### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 8052 BLDG NAME: SR ENL QTRS

ELECTRIC METER: N

CONDITIONED SQFT:

22,700

GAS METER: N
SUSPECT ACM: N

#### **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 10

WED: THUR: FRI: SAT: SUN: MON: TUE: PRES START: 0 0 0 0 24 24 24 24 24 PRES STOP: 24 0 0 0 0 0 0 0. REQ START: 24 24 24 24 24 REQ STOP: 24 24

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO:** 1406-001 **DATE:** 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

# AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER: 8052 AHU NUMBER: FC-1	AHU LOG	CATION: THROUGHOUT BLDG
REFRIG SYS # SRVNG AHU: CV	% OF BLDG AREA HE	AREA: ALL ATED: 100
AHU UNIT TYPE FAN COILS - 2	PIPE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	28,800 CFM	P-CLG: 28,800
MIN %OA:		%OA: 0
NAMEPLATE		
UNIT MFG:		UNIT MODEL:
SUPPLY FAN HP:	<u>5</u> F	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EX	H FAN MTR MFG:
SUPPLY FAN MTR MODEL:		AN MTR MODEL:
COMMENTS: TOTAL	FOR 72 FAN COILS	
COILS		
Coil	Coil Type Modu	ılating Valve?
PREHEAT COIL: NONE		
HEATING COIL: DUAL T	EMP WATER	
REHEAT COIL: NONE	<u> </u>	
HUMIDIFIER: NONE COOLING COIL: NONE		
` <del></del>	: L	
SCHEDULE		
DAY SCHEDULE NO: 10		MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FF	RI: SAT:
PRES START: 0 0	0 0 0	0 0
PRES STOP: 24 24	24 24 24	24 24
REQ START: 0 0	0 0 0	0 0
REQ STOP: 24 24	24 24 24	24 24
MONTHS JAN: FEB: MAR: A	APR: MAY: JUN: JUL: /	AUG: SEP: OCT: NOV: DEC:
CONTROLS		
TYPE OF CONTROLS:	ELECTRIC	HERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0	COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER	SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:		R SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL:	N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL:	
RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL:	
EXH AIR DMPR CONTROL: N		
OTHER CONTROLS DESCR:	-	
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

EMC NO: 1406-001

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING	NUME	3ER: 8	052				E	BOILER	RM LOC	ATION:	MER		
BOILER	UNI	Т											
			_	BLR/CO	NVERT	ER SER	VES ARE	A OR SE	RVICE:	ALL			
SOURCE	OF BLI	DG HEA	Τ										
	OILER	_					-	NVERT					
	ILER T				CONVERTER TAG: CV-1  CONVERTER TYPE: STM TO HW								
	LER T						1			STM TO HV			
FI	UEL TY	YPE:					CONV	HT SOL	JRCE:	CENTRAL	PLANT		:
● CENT	RAL PI	LANT DI	RECT										
NAMEPL	ATE	=				% <i>F</i>	AREA HE	ATED BY	BB RA	DIATION:			0
BOILER MFG	S:						BLR CA	AP OUTP	UT (BTU	JH):		(	<u></u>
UNIT MODEL	-:						BLR	CAP INP	UT (BTL	JH):		(	<u> </u>
COMMENTS	3: —												
	,												لب
SCHEDU	<u>LE</u>												
DAYS SCHE SCHEDULE CO		_	10						MONT	H SECHE	OULE NO		3
PRES STAI	рт· _	SUN:	MON:	TUE		ED: TH	IUR:	FRI:	SAT: 0				
PRES STO	=	24	24	24		24	24 =	24	24				
REQ STAI	=	0	0		= ====	0	0	0	0				
REQ STO	=	24	24	24	¥	24	24	24	24				
MONTHS J	AN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON: [	$\boxtimes$	$\boxtimes$		$\boxtimes$		$\boxtimes$				$\boxtimes$		$\boxtimes$	
CONTRO	LS												
TYPE	OF B	LR CON	TROLS:	ELECT	RIC				RESE	T CONTI	ROLS: [	N	
OF	PERAT	ING SET	POINT:	i		0 DEG F	or PSIG						
TYPE OF	BURNI	ER CON	TROLS:										
co	NTROL	S COM	MENTS:										
HW PUM	Р			_									
PUMP T/	<u></u>	TWP-1			IP HP:				PUMP M		ELECTR		
PUMP SERVI	CE: E	DUAL TE	MP PUM	IP				PUI	MP MOD	EL: F80	074-01239	9L14R033	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

8052

FILE: 8052.XLS

	AIR	HANDLIN	IG UNIT - HVAC	UPGRADE	OBSERVA	ATIONS		
.HU NO.:	FC-1	LOCATIO	N (Rm) ALL					
HU TYPE:	FC 2P	MFG.:			MODEL:			
Z - Single Zone	H&V - Hea	ating & Vntltng		an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	ipe)	
IZ - Mulitzone	VAV - Var	iable Air Vol.		Reheat System				
D - Dual Duct	UH - Unit I	Heater	IND -	Induction System				
).A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Dampe	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:			-	
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
NLET VANES	N/A: X	OK:	ICOMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:				1				
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	IDD ACT.*	RP-BD:
HEATING COIL	N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:*	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:			OR INOPERABLE	SIZL.	CIVILVEV	OK.		
COMMENTS:	SEVERA	L ARE LEAK	OR INOPERABLE				RP-ACT = Replace	
					······································		RP-BD = Replace S	Body
***************************************								
AHU PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
		IOV. V	MISSING:	IESTIMAT	ED QUANTITY			
PIPE INSULATION	N/A:	OK: X	IMICONIO.					
PIPE INSULATION DUCT INSULATION	N/A: N/A: X	OK: X	MISSING:		ED QUANTITY			
DUCT INSULATION								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG: 8052 FILE: 8052.XLS

BOILER & CONVERTER - HVAC UPGRADE OBSERVATIONS

	BOILE	R & CON	IVERTER - HVAC	UPGRADE OBSE	ERVATIONS	
BOILER/CONVERTER NO	),	CV-1	LOCATION (RM)	MER		
BOILER TYPE:			MFG.:	MODE	EL:	
CONVERTER TYPE:		STM/HW	MFG.:	MODE		
STM - Steam	:STM/HW -	Steam to Ho	ot Water Conv.	HTHW/STM - High	Temp HW to Steam Convertor	
HW - Hot Water	HTHW/HV	V - High Tem	p. HW to HW Cv.	DHW - Domestic Ho	ot Water Convertor	
BOILER BURNER	ATMOSPI	HERIC:	POWER:	OK:	REPLACE:	
COMMENTS:	CONV = 1	0" X 69"				
DI D DI MOTOD	Thu. V	Iov.	IDEDI ACE.	SIZE:		
BLR PUMP MOTOR BLR PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE:		
	IN/A: X	JUK:	TREPLACE:	JSIZE:		
COMMENTS:						
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUAN		
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUAN	ITITY:	
COMMENTS:						
		,				
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
COMMENTS:						
CV PUMP MOTOR	N/A:	OK: X	REPLACE:		URY 5 HP/DUAL TEMP.	
CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
COMMENTS:	NEED ~ 3	0' OF 4" INS	ULATION ON CW AND (	WR LINES		
CV INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUAN		
CV PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUAN	ITITY:	
COMMENTS:	CW CON	TROL VALVE	OK			
	STEAM C	ONTROL VA	LVE OK			
	DUAL TEI	MP. CHANG	EOVER VALVE			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE:** 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/CWW/AJN

13,493

**BUILDING DATA SURVEY OBSERVATIONS** 

BLDG NUMBER: 7806 BLDG NAME: BN HQ BLDG

ELECTRIC METER: N CONDITIONED SQFT:

GAS METER: Y

SUSPECT ACM: N

**BUILDING OCCUPANCY SCHEDULE** 

BUILDING SCHDULE NO: 25

TUE: WED: THUR: FRI: SAT: MON: SUN: 0 0 0 0 PRES START: 24 24 24 24 24 24 24 PRES STOP: 5 5 5 5 0 0 REQ START: 20 20 REQ STOP: 0 20 20 20

**REMARKS:** 

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/CWW/AJN

## AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER: 78		J. MF77
REFRIG SYS # SRVNG AHU: (	% OF BLDG AREA HEATED:	ADMINISTRATIVE 32
AHU UNIT TYPE SINGLE ZON	IE NU	JMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	6,400 <b>CFM-CLG</b> :	6,400
MIN %OA:	0 MAX %OA:	0
NAMEPLATE		
UNIT MFG: TRAI	NE CLIMATE CHANGER UN	IT MODEL: L-14
SUPPLY FAN HP:	3 RET/EX	H FAN HP: 0
SUPPLY FAN MTR MFG: MAR	ATHON ELEC RET/EXH FAN	MTR MFG:
SUPPLY FAN MTR MODEL: 7D18 COMMENTS:	2TTFS7028A RET/EXH FAN MT	R MODEL:
COILS		
Coil	Coil Type Modulating	Valve?
PREHEAT COIL: NON		
HEATING COIL: STEA		
REHEAT COIL: NON		
HUMIDIFIER: NON		
COOLING COIL: CW		
SCHEDULE		
DAY SCHEDULE NO: 25		MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN: MON	: TUE: WED: THUR: FRI:	SAT:
PRES START: 0 0		0
PRES STOP: 24 24		24
REQ START: 0 5		0
REQ STOP: 0 20		0
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON:		□ □ □ □
CONTROLS		
TYPE OF CONTROLS	PNEUMATIC THERM	OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC	90 HOT	DECK DEG F: 0
PRESENT TEMP WINTR UNOCC	COLD	DECK DEG F: 0 ED AIR DEG F: 0
PRESENT TEMP SUM OCC PRESENT TEMP SUM UNOCC	O OTHER SETPO	
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N	IMADI EMENT DEMAND LIMIT CATTO CO.
MAX OA DMPR CONTROL: N	=	IMPLEMENT DEMAND LIMIT CNTRLS? Y TIME CLOCK: N
RET AIR DMPR CONTROL: N	ECONOMIZER UB CONTROL: N	<u></u>
EXH AIR DMPR CONTROL: N	LCONOMIZER AND COMINOL: [14]	TIME CLOCK OPERATIONAL? N
EXTENSION DIMER CONTROL.	] —	
OTHER CONTROLS DESCR		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

**DATE:** 10/10/94 PREPARED BY: JM/CWW/AJN

# AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER			
AHU NUMBER	: AHU-2	AHU LOCATION: MEZZ	
REFRIG SYS # SRVNG AF	IU: CH-1	SERVES AREA: ADMINISTRAT	IVE
	% OF BLDO	G AREA HEATED:	32
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZON	ES IF MZ UNIT: 0
CFM-HTG:	6,600	CFM-CLG:	6,600
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:	TRANE CIMATE CHANGER	UNIT MODEL: L-1	4
SUPPLY FAN HP:	3	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	7E182TTFS7028A	RET/EXH FAN MTR MODEL:	
COMMENTS:	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	25	MONTH SCHI	EDULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: TH	IUR: FRI: SAT:	
PRES START: 0	0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START:0	5 5 5	5 5 0	
REQ STOP: 0	20 20 20	20 20 0	,
MONTHS JAN: FEB: I	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT TYPE:	SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC: 90	HOT DECK DEG F: COLD DECK DEG F:	0
PRESENT TEMP WINTR U	NOCC: 0	MIXED AIR DEG F:	0
PRESENT TEMP SUN	A OCC: 0	OTHER SETPOINT DESCRIP:	0
PRESENT TEMP SUM U		OTHER SETPOINT DESCRIP.	0
MIN OA DMPR CONTROL	.: N MIXED AIR DMPR	CONTROL: N IMPLEMENT	DEMAND LIMIT CNTRLS? Y
MAX OA DMPR CONTROL		<del></del>	TIME CLOCK: N
			CLOCK OPERATIONAL? N
RET AIR DMPR CONTROL EXH AIR DMPR CONTROL		TIME	OLOGN OFERATIONAL!
OTHER CONTROLS D	· · · · · · · · · · · · · · · · · · ·		
CONTROLS COMM	IENTS.		1

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: JM/CWW/AJN

## **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING N	JMBER:	7806				BOILER	RM LOC	ATION:	MER		
BOILER UI	TIN										
source of	BLDG HE	EAT	BLR/CO	NVERTER	SERVES AF	REA OR S	ERVICE:	ALL		A STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STA	
● ⊠ BOIL	ER					CONVERT	ER				<del></del> .
BOILE	R TAG:	BLR-1			CO	NVERTER	R TAG: 📱				
		MED PRESS	S STEAM (1	5# TO 125#)		IVERTER	_				
FUE	L TYPE:	NAT. GAS			COI	NV HT SO	URCE:				
· CENTRA	L PLANT	DIRECT									
NAMEPLA	TE				% AREA H	EATED B	Y BB RAI	DIATION:			36
BOILER MFG:	OSAGE				BLR (	CAP OUT	PUT (BTU	H):		818,400	
UNIT MODEL:	3-5-1023				BL	R CAP INF	PUT (BTU	H):		1,023,000	
COMMENTS:	, mar. 1										
SCHEDULI											
DAYS SCHEDU	JLE NO:	25					MONTH	H SECHE	ULE NO		1
SCHEDULE COM	MENTS:										
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START:		0	0	0	0	0	0				
PRES STOP:		: ====	24	24	24	24	24				
REQ START:		: =====	5	5	= 5	5	0				
REQ STOP:	0	20	20	20	20	20	0				
MONTHS JAN	: FEB:	MAR:	APR:	MAY: J	IUN: JUL	: AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$		$\boxtimes$		п п	П	П	$\boxtimes$	$\boxtimes$	$\boxtimes$	
	- India		Panel I	<u> </u>				لنا			:
CONTROL	S										
TYPE O	F BLR CO	NTROLS:	ELECTF	RIC	}		RESE	T CONTE	ROLS:	Y	
OPER	RATING S	ETPOINT:		7.5 <b>D</b> E	EG F or PSIC	3			_		
TYPE OF BU	RNER CO	NTROLS:									
CONT	ROLS CO	MMENTS:	;								
											i

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: JM/CWW/AJN

## **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBE	R: 7806			E	OILER F	M LOCA	ATION:	MEZZ		
<b>BOILER UNIT</b>										
		BLR/CON	VERTER SER	VES ARE	A OR SE	RVICE:	ALL			
SOURCE OF BLD	G HEAT									
● □ BOILER				<u> </u>	NVERTE	R				
BOILER TA	۱G:			CON	ERTER	TAG:	CV-1			
BOILER TY	PE: :				ERTER T		VH OT MT	V		
FUEL TYP	PE:			CONV	HT SOU	RCE: E	BLR-1			
CENTRAL PL	ANT DIRECT									
NAMEPLATE			% <i>F</i>	AREA HEA	ATED BY	BB RAD	DIATION:			36
BOILER MFG: BUN	HAM/BUSH			BLR CA	P OUTP	JT (BTU	H):		0	_ ! _
UNIT MODEL: SCA	-63-2-1			BLR (	CAP INPL	JT (BTU	H):		C	j .
COMMENTS: Year	built: May 196	<u></u>							· · · · · · · · · · · · · · · · · · ·	-
										_
SCHEDULE										
DAYS SCHEDULE N	IO: 25					MONTH	I SECHD	ULE NO:		1
SCHEDULE COMMEN	rs:									
	SUN: MON	: TUE:	WED: TH	IUR:	FRI:	SAT:				
PRES START:	0	0 0	0	0	0	0				:
PRES STOP:	24 2	= ====	24	24	24	24				
REQ START:		5 5	5	5	5	0				
REQ STOP:	0 2	0 20	20	20	20	0				
MONTHS JAN: F	EB: MAR:	APR: N	MAY: JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:		$\boxtimes$			П		$\boxtimes$	$\boxtimes$	$\boxtimes$	:
						ш	<u> </u>			
CONTROLS										M.
TYPE OF BL	R CONTROLS	: PNEUMA	TIC			RESE	T CONTE	ROLS:	N	
OPERATI	IG SETPOINT	:	0 DEG F	or PSIG						
TYPE OF BURNE	R CONTROLS	:								
CONTROLS	COMMENTS	: 2-Way co	ntrol valve							

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/10/94

PREPARED BY: JM/CWW/AJN

## PERIMETER RADIATION SURVEY OBSERVATIONS

<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>													
BLDG NU	MBER:	7806				BLDG N	IAME:	BN HQ B	LDG				
PER RAD	(SYSTE	M TAG) NO	: RAD-	.1			RAD S	YS LOCA	TION:	BLDG PE	RIMETE	R	
so	URCE OF	F HEATING	: BLR-	1			S	ERVES A	AREA:	ALL			
RAD	DIATION	UNIT TYPE	: HW					% AREA	HTG:		3	6	
RADIA	TION	PUMF	•										
PUMP	TAG: H	P-1		PUM	P HP:	0.	75	PUMP	MFG:	BALDOR			
							l	PUMP MO	DDEL:	-			
SCHEE	DULE												
DA	AYS SCH	EDULE NO	:	25		MON	NTHS SC	HEDULE	NO:		1		
SCH	EDULE C	OMMENTS	:										
		SUN:	MON:	TUE:	WE	D: TH	IUR:	FRI:	SAT:				
PRES S	START:	0	0	0		0	0	0	0				
PRES	STOP:	24	24	24		24	24	24	24				
REQ S	START:	0	5	5			5	5	0				
REQ	STOP:	0	20	20	-	20	20	20	0				
MONTHS	JAN:	FEB: I	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$						$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONT	ROLS	)											
TY	YPE OF F	RAD. CONT	ROLS:	PNEUM	IATIC								
	RADIA	TION CON	TROL:	3-WAY	VALVE	HW RE	SET						
	oc	C HT SPA	CE SP:		0								
		C HT SPAC			0			R	ESET C	ONTROL:	N		
	CONTR	ROL COMM	ENTS:	Perimet	er radia	ition und	er windov	ws with m	anual co	ntrol valve	es		-

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/10/94

PREPARED BY: JM/CWW/AJN

# REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7806	BLDG NAME: BN HQ BLDG
REF. UNIT NUMBER/TAG: CH-1	LOCATION (MER#): MER
ILL. OHIT HOMEBUILDING	AHU'S SERVED: AHU-1, AHU-2
UNIT TYPE RECIPROCA	TING WITH AIR COOLED CONDENSING UNIT
NAMEPLATE	
CHILLER MFG: TSI	TOWER MFG: TSI
CHILLER MODEL: SC2CD70	# OF TOWER FANS: 6
CHILLER SERIAL NO: 9836-3	TOWER FAN V: 0
CHILLER V:	0 TOWER FAN AMPS: 0
CHILLER AMPS: 27	TOWER FAN HP: 1
CHILLER PH:	0
CHILLER CAP (TONS): 73	.8
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 25	MONTHS SCHEDULE NO: 2
SCHEDULE COMMENTS:	
SUN: MON: TUE:	WED: THUR: FRI: SAT:
PRES START: 0 0 0	0 0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 5 5	5 5 5 0
REQ STOP: 0 20 20	20 20 20 0
MONTHS JAN: FEB: MAR: APR:	MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	
CINIC PETROINT.	0 CNWS SETPOINT: 0
CWS SETPOINT: CWR SETPOINT:	0 CNWR SETPOINT: 0
CWR SETPOINT.	U CHANGET OINT.
PRESS LITE HI: N	TEMP LITE HI: N OTHER INDICATIORS:
	EMP LITE LOW: N
PRESS GAUGES: Y	TEMP GAUGES: Y
CONTROLS COMMENTS:	
CW and CNW PUMPS	
PUMP TAG: 1 PUMP HP	PUMP MFG: CENTURY
PUMP SERVICE: CW PUMP (Chilled Water)	PUMP MODEL: 6-322801-01
TOTAL OTT OTT (OTTACE)	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7806

FILE:

	AIR I	HANDLIN	G UNIT - HVA	C UPGRADE C	DBSERVA	TIONS	<u> </u>	
AHU NO.:	AHU-1	LOCATIO	N (Rm) M	EZZANINE				
AHU TYPE:	SZ	MFG.:	TRANE		MODEL:			
SZ - Single Zone	H&V - He	ating & Vntltng	j. F(	C - Fan Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pip	oe)	
MZ - Mulitzone	VAV - Va	riable Air Vol.	RI	HT - Reheat System			•	
DD - Dual Duct	UH - Unit	Heater	,IN	D - Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	LINKED (	DA AND RA					DPR-ACT = Damp	per Actuator
							RP-ACT = Replac	e Actuator
EU TED OFOTION	10.144	12						
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS;			
SUPPLY FAN MOTOR	OK: X	TREPLACE		COMMEN		3 HP		
INLET VANES	N/A: X	IOK:	COMMENTS:	1				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	TS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		107		
COMMENTS:				Toommen.				
001111101							<u>-</u>	
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replac	e Actuator
							RP-BD = Replace	Body
						****		
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				<del></del>
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:		10."	112. 2102.	10,22.				
O O MINICIPALITY OF							<del></del>	
		OK: X	MISSING:	ESTIMATE	ED QUANTITY:			
	N/A:							
PIPE INSULATION DUCT INSULATION COMMENTS:	N/A: N/A:	OK: X	MISSING:	ESTIMATE	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7806

FILE:

ALIEI NO .	AHU-2	LOCATIO	G UNIT - HVAC	ZANINE			
AHU NO.: AHU TYPE:	SZ	MFG.:	TRANE	ZAMINE	MODEL:	L-14	
SZ - Single Zone		ating & Vntltng		Fan Coil (Indicate 2			۵۱
MZ - Mulitzone		iable Air Vol.	,	- Reheat System	21 101 2 1 1pc 01	יקו ודיוטו וד	<i>-</i> ,
DD - Dual Duct	UH - Unit			Induction System			
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
E.A. DAMPER	N/A: X	OK: X	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
COMMENTS:			RS ARE INTERLOCK				DPR-ACT = Damper Actuator
SOMMETATO.		DISCONNEC					RP-ACT = Replace Actuator
	111 (O Z 10	2,000111120					
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:			
COMMENTS:		1=::::::		1			
33arr							
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN			
INLET VANES	N/A: X	OK:	COMMENTS:		·		
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A	
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A	
COMMENTS:		INCI DIOL		TOO!!!!!E!!			
COMMENTS.							
COOLING COIL	IN/A·	IOK: X	REPLACE:	SIZE:	CNTLVLV	IIOK: X	IRP-ACT: IRP-B
	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP-B
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:		11	
HEATING COIL PREHEAT COIL	II				CNTLVLV	ок: х	RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A: N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B RP- ACT: RP-B

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7806

FILE:

DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEF		KLFKIG			HVAC UPGRADE OBSERVATIONS	
C-WCT = Centrifugal w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CT						
ASB-WCT = Absorption w/ Water Side Cooling Tower						
ACCU = Air Cooled Condensing Unit  CT = Cooling Tower  COMP. MOTOR  N/A: OK: X REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  COMP. MOTOR  N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  CT/ACCU FAN MTR  N/A: OK: REPLACE: SIZE:  COMMENTS:  ACCU IS TSI MODEL 10A076  COOLING TOWER  N/A: OK: REPLACE: SIZE:  COMMENTS:  NEEDS INSULATION 35* @ 1-1/2*  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHIV PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR	•		-			
COMP. MOTOR         N/A:         OK:         X         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           ST/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         ACCU IS TSI MODEL 10A076         SIZE:           COOLING TOWER         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         NEEDS INSULATION 35' @ 1-1/2'         SIZE:           COMMENTS:         NEEDS INSULATION 35' @ 1-1/2'         ESTIMATED QUANTITY:           CHW PIPE INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:           CHW PIPE INSUL.         N/A:         OK:         X         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         X         REPLACE:         SIZE:           CHW PUMP S						
COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           COMP. MOTOR         N/A:         OK:         REPLACE:         SIZE:           CT/ACCU FAN MTR         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         ACCU IS TSI MODEL 10A076         SIZE:           COOLING TOWER         N/A:         OK:         REPLACE:         SIZE:           COMMENTS:         NEEDS INSULATION 35' @ 1-1/2'         SIZE:           COMMENTS:         NEEDS INSULATION 35' @ 1-1/2'           CHILLER INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:           CHW PIPE INSUL.         N/A:         OK:         X         MISSING:         ESTIMATED QUANTITY:           CHW PUMP MOTOR         N/A:         OK:         X         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:						
DOMP. MOTOR		III .	1			
COMP. MOTOR		11				
COLING TOWER NA: OK: REPLACE: SIZE: TYPICAL OF 6 FANS  COMMENTS: ACCU IS TSI MODEL 10A076  COOLING TOWER NA: OK: REPLACE: SIZE:  COMMENTS: ACCU IS TSI MODEL 10A076  COOLING TOWER NA: OK: REPLACE: SIZE:  COMMENTS: NEEDS INSULATION 35' @ 1-1/2'  CHILLER INSUL. NA: OK: X MISSING: ESTIMATED QUANTITY:  CHILLER INSUL. NA: OK: X MISSING: ESTIMATED QUANTITY:  CHIW PIPE INSUL. NA: OK: X MISSING: SIZE:  CHW PUMP MOTOR NA: OK: X REPLACE: SIZE:  CHW PUMP SEALS NA: OK: X REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: X REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: X REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:  CHW PUMP MOTOR NA: OK: REPLACE: SIZE:		11	I		1	
DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEFINITION   DEF		N/A:	OK:	REPLACE:	SIZE:	
CTIACCU FAN MTR	CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE: TYPICAL OF 6 FANS	
COMMENTS:  ACCU IS TSI MODEL 10A076  COOLING TOWER  N/A: OK: REPLACE: SIZE:  AIR COOLED COND. N/A: OK: X REPLACE: SIZE:  COMMENTS: NEEDS INSULATION 35 @ 1-1/2*  CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COOLING TOWER   N/A:   OK:   REPLACE:   SIZE:   AIR COOLED COND.   N/A:   OK:   X   REPLACE:   SIZE:   COMMENTS:   NEEDS INSULATION 35' @ 1-1/2'    CHILLER INSUL.   N/A:   OK:   X   MISSING:   ESTIMATED QUANTITY:   CHW PIPE INSUL.   N/A:   OK:   X   MISSING:   ESTIMATED QUANTITY:   COMMENTS:   CHW PUMP MOTOR   N/A:   OK:   X   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   X   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP SEALS   N/A:   OK:   REPLACE:   SIZE:   CHW PUMP MOTOR   N/A:   OK:   REPLACE:   SIZE:	CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS: NEEDS INSULATION 35' @ 1-1/2'  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  CHW PUMP MOTOR  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:	COMMENTS:	ACCU IS	TSI MODEL 1	0A076		
AIR COOLED COND.  N/A: OK: X REPLACE: SIZE:  COMMENTS: NEEDS INSULATION 35' @ 1-1/2'  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  CHW PUMP MOTOR  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:	COOLING TOWER	ΙΝΙ/Δ ·	IOK:	IREDI ACE:	Icize.	
COMMENTS:  NEEDS INSULATION 35' @ 1-1/2'  CHILLER INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR  N/A: OK: REPLACE: SIZE:						
CHILLER INSUL.  N/A:  OK: X  MISSING:  ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK: X  REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK: REPLACE:  SIZE:  CHW PUMP SEALS  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  REPLACE:  SIZE:  CHW PUMP MOTOR  N/A:  OK:  N/A:				SIZE:		
CHW PIPE INSUL.  N/A: OK: X MISSING: ESTIMATED QUANTITY:  COMMENTS:  CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP SEALS N/A: OK: REPLACE: SIZE:  CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:					ICCTIMATED QUANTITY.	
CHW PUMP MOTOR						
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:	CHW PIPE INSUL.					
CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:	CHW PIPE INSUL. COMMENTS:	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:   SIZE:	
CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A:	OK: X OK: X	MISSING:  REPLACE: REPLACE:	SIZE: SIZE:	
CHW PUMP SEALS         N/A:         OK:         REPLACE:         SIZE:           CHW PUMP MOTOR         N/A:         OK:         REPLACE:         SIZE:	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A:	OK: X OK: X OK: X	MISSING:    REPLACE:   SIZE: SIZE: SIZE:		
CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL.  COMMENTS:  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP MOTOR  CHW PUMP SEALS  CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL. COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL.  COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL.  COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL.  COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
	CHW PIPE INSUL.  COMMENTS:  CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR	N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:  N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	MISSING:  REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7806

FILE:

	BOILE	R & CON	<b>VERTER - HVAC</b>	UPGRADE OBSERVATIONS
BOILER/CONVERTER NO	).	BLR-1	LOCATION (RM)	MER
BOILER TYPE:		STM	MFG.:	MODEL:
CONVERTER TYPE:			MFG.:	MODEL:
STM - Steam			t Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water			o. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSPI	HERIC:	POWER:	OK: X REPLACE:
COMMENTS:				
BLR PUMP MOTOR	N/A: X	lok:	REPLACE:	SIZE:
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
JOHN LITTO.				
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				
***************************************				
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
	Thurs of	Torr	Inchi Ace	10.75
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE: .
CV PUMP SEALS	N/A: X	OK:	KENTACE:	JOILE.
COMMENTS:				
CV INSULATION	N/A: X	JOK:	MISSING:	IESTIMATED QUANTITY:
CV PIPE INSUL.	N/A: X	OK:	MISSING:	IESTIMATED QUANTITY:
COMMENTS:		1	1	
O GIANTELLA TO.				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7806

FILE:

	BOILE	R & CON	VERTER - HVAC	UPGRADE OBSERVATIONS
BOILER/CONVERTER NO	D.	CV-1	LOCATION (RM)	MEZZANINE
BOILER TYPE:		STM	MFG.:	MODEL:
CONVERTER TYPE:		STM/HW	MFG.:	MODEL:
STM - Steam	STM/HW	- Steam to Ho	t Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water			o. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSP	HERIC:	POWER:	OK: REPLACE:
COMMENTS:	DHW-CV'	S ARE DISCO	NNECTED FROM STM S	SUPPLY. PERIMETER RADIATION HAS
	MANUAL	SHUTOFF VA	ALVES	
BLR PUMP MOTOR	N/A: X	IOK:	REPLACE:	SIZE:
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:		101		Totale.
COMMENTO.				
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:	1/2 HP			
	T			
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:		**************************************		
CVINCILIATION	UNIVA.	Tolk V	Turonyo	
CV INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				
	W-11			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/05/94

LOCATION: FT. RILEY, KS PREPARED BY: AJN/CWW

## **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 8025 BLDG NAME: BN ADMIN & CLRM

GAS METER: N
SUSPECT ACM: N

CONDITIONED SQFT: 12,000

# **BUILDING OCCUPANCY SCHEDULE**

BUILDING SCHDULE NO: 31

MON: TUE: WED: THUR: FRI: SAT: SUN: 0 0 PRES START: 0 0 0 0 0 24 24 24 24 24 24 24 PRES STOP: 0 9 9 7 9 0 REQ START: 18 0 18 REQ STOP: 0 18 18 18

#### **REMARKS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/05/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

#### AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBE AHU NUMBE		AHU LOCATION: MER
REFRIG SYS # SRVNG	AHU: CENTRAL PLANT % OF E	SERVES AREA: N.W. CLASSROOMS  BLDG AREA HEATED: 0
AHU UNIT TYPE MUL	TI ZONE	NUMBER OF ZONES IF MZ UNIT: 3
CFM-HTG	i: 0	<b>CFM-CLG:</b> 2,610
MIN %OA		MAX %OA: 100
NAMEPLATE		
UNIT MFG	: TRANE	UNIT MODEL: MZ-43
SUPPLY FAN HP	2:	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG	: MARATHON	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL	.: EB145TTDR79227	RET/EXH FAN MTR MODEL:
COMMENTS		
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL	: NONE	
HEATING COIL		
REHEAT COIL	: NONE	. 🗖
HUMIDIFIER	: NONE	
COOLING COIL	: CW	
SCHEDULE		
DAY SCHEDULE NO: SCHEDULE COMMENTS:	31	MONTH SCHEDULE NO: 2
CHAL	MON. THE WED.	TIMD. FDI. CAT.
PRES START: 0	MON: TUE: WED: 0 0	THUR: FRI: SAT:
PRES STOP: 24	$\begin{array}{c cccc}  & 0 & 0 & 0 \\ \hline  & 24 & 24 & 24 & 24 &  \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
REQ START: 0	9 7 9	$\frac{24}{7}$ $\frac{24}{9}$ $\frac{24}{0}$
REQ STOP: 0	18 18 18	18 18 0
MONTHS JAN: FEB:	MAR: APR: MAY: J	UN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:		
CONTROLS		
T/DE 05 00 1	TDOLO. DNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
TYPE OF CON	ITROLS: PNEUMATIC	
PRESENT TEMP WINT		HOT DECK DEG F: 0
	TR OCC:	COLD DECK DEG F: 0
PRESENT TEMP WINT	TR OCC: (	COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP WINT	IR OCC: ( UNOCC: ( UN	COLD DECK DEG F: 0
PRESENT TEMP WINT PRESENT TEMP WINTR PRESENT TEMP SU	IR OCC: ( UNOCC: ( UN	COLD DECK DEG F: 0  MIXED AIR DEG F: 0  OTHER SETPOINT DESCRIP: 0  OTHER SETPOINT DEG F: 0
PRESENT TEMP WINT PRESENT TEMP WINTR PRESENT TEMP SUM PRESENT TEMP SUM	IR OCC: (COMPANY) UNOCC: (COMPANY) UNOCC: (COMPANY) UNOCC: (COMPANY) DL: [N] MIXED AIR DR	COLD DECK DEG F: 0  MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP: 0  O OTHER SETPOINT DEG F: 0  MPR CONTROL: Y IMPLEMENT DEMAND LIMIT CNTRLS? Y
PRESENT TEMP WINT PRESENT TEMP WINTR PRESENT TEMP SU PRESENT TEMP SUM MIN OA DMPR CONTRO	IR OCC: (CUNOCC: (CUN	COLD DECK DEG F: 0  MIXED AIR DEG F: 0  OTHER SETPOINT DESCRIP: 0  OTHER SETPOINT DEG F: 0  MPR CONTROL: Y IMPLEMENT DEMAND LIMIT CNTRLS? Y  R DB CONTROL: N TIME CLOCK: N
PRESENT TEMP WINT PRESENT TEMP WINTR  PRESENT TEMP SUM PRESENT TEMP SUM MIN OA DMPR CONTRO MAX OA DMPR CONTRO	IR OCC: (COMPANY)  UNOCC: (COMPANY)  ECONOMIZER  ECONOMIZER	COLD DECK DEG F: 0  MIXED AIR DEG F: 0  O OTHER SETPOINT DESCRIP: 0  O OTHER SETPOINT DEG F: 0  MPR CONTROL: Y IMPLEMENT DEMAND LIMIT CNTRLS? Y  R DB CONTROL: N TIME CLOCK: N

CONTROLS COMMENTS: CW control valve serves all 3 AHU's

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

ACA 01-94-D-0033

DATE: 10/05/94
PREPARED BY: AJN/CWW

EMC NO: 1406-001

AIR HANDLING UNIT SURVEY OBSERVATIONS

	Antibut	DENICO CITIL CO		
	BUILDING NUMBER: 8 AHU NUMBER: A		AHU LOCATION: MEI	२
	REFRIG SYS # SRVNG AHU:		SERVES AREA: CENT	RAL CLASSROOMS 0
	AHU UNIT TYPE MULTI ZON	NE :	NUMBER	OF ZONES IF MZ UNIT: 5
•	CFM-HTG:	0	CFM-CLG:	4,850
	MIN %OA:	20	MAX %OA:	100
١	IAMEPLATE			
	UNIT MFG: TR	ANE	UNIT MOD	EL:
	SUPPLY FAN HP:	3	RET/EXH FAN	HP: 0
	SUPPLY FAN MTR MFG: MA	RATHON	RET/EXH FAN MTR M	FG:
	SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MOD	EL:
	COMMENTS:			
C	OILS			
	Coil	Coil Type	Modulating Valve?	
	PREHEAT COIL: NO	NE		
	HEATING COIL: NO	NE		
	REHEAT COIL: NO	NE		
	HUMIDIFIER: NO	NE		
	COOLING COIL: CV	<u> </u>	$\boxtimes$	
S	CHEDULE			
	DAY SCHEDULE NO:	31	MON	ITH SCHEDULE NO: 2
	SCHEDULE COMMENTS:			
_	SUN: MC	N: TUE: WED: TH	IUR: FRI: SAT:	
	PRES START: 0	0 0 0	0 0 0	
	PRES STOP: 24	24 24 24	24 24 24	:
	REQ START: 0	9 7 9	7 9 0	i i
	REQ STOP: 0	18 18 18	18 18 0	!
- 	MONTHS JAN: FEB: MAF	: APR: MAY: JUN:	JUL: AUG: SEP:	OCT: NOV: DEC:
	ON:			
_	CONTROLS			
	TYPE OF CONTROL	S: PNEUMATIC	THERMOSTA	T TYPE: SINGLE SETPOINT
			HOT DECK	DEG F: 0
	PRESENT TEMP WINTR OF		COLD DECK	DEG F: 0
	PRESENT TEMP WINTR UNO		MIXED AIR	
	PRESENT TEMP SUM OC		OTHER SETPOINT DE	
	PRESENT TEMP SUM UNO	C: 0	OTHER SETPOINT	DEG F: 0
	MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: Y IMPL	EMENT DEMAND LIMIT CNTRLS?
	MAX OA DMPR CONTROL:	Y ECONOMIZER DB	CONTROL: N	TIME CLOCK: N
	RET AIR DMPR CONTROL:	Y ECONOMIZER WB	CONTROL: N	TIME CLOCK OPERATIONAL? N
	EXH AIR DMPR CONTROL:	N		
	OTHER CONTROLS DESC	R:		:
	CONTROLS COMMEN	<del>, , , , , , , , , , , , , , , , , , , </del>	s all 3 AHU's	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

**EMC NO**: 1406-001 **DATE**: 10/05/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

### AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER: 8025 AHU NUMBER: AHU		HU LOCATION: MER	:
REFRIG SYS # SRVNG AHU: CE		RVES AREA: EAST ADMII	N & CLASSROOMS
	% OF BLDG AR	EA HEATED:	0
AHU UNIT TYPE MULTI ZONE		NUMBER OF ZO	NES IF MZ UNIT: 3
CFM-HTG:	0	CFM-CLG:	2,610
MIN %OA:	30	MAX %OA:	100
NAMEPLATE			
UNIT MFG: TRAN	-	UNIT MODEL:	MZ-6
SUPPLY FAN HP:	2	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG: MARA	THON F	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: EB145	TTDR7927A RET	/EXH FAN MTR MODEL:	
COMMENTS:			1
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: NONE	1	П	
HEATING COIL: NONE			
REHEAT COIL: NONE	!		
HUMIDIFIER: NONE			
COOLING COIL: CW			
SCHEDULE			
DAY SCHEDULE NO: 31		MONTH SC	HEDULE NO: 3
SCHEDULE COMMENTS:			TIEDOLL NO.
CUIN MON	THE MED THE		
PRES START: 0 0	TUE: WED: THUR:	FRI: SAT:	:
	$\frac{0}{24}$ $\frac{0}{24}$ $\frac{0}{24}$	0 0	
PRES STOP: 24 24 REQ START: 0 9	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24 24	
REQ STOP: 0 18		9 0	:
REGISTOF. 0 10	18 18 18	18 0	:
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JI	JL: AUG: SEP: OCT	T: NOV: DEC:
ON:			
CONTROLS			·
TYPE OF CONTROLS:	PNEUMATIC	THERMOSTAT TYPE	: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	HOT DECK DEG F	
PRESENT TEMP WINTR UNOCC:	0	COLD DECK DEG F	
		MIXED AIR DEG F	
PRESENT TEMP SUM OCC:		THER SETPOINT DESCRIP	
PRESENT TEMP SUM UNOCC:	0	OTHER SETPOINT DEG F	<u> </u>
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CON	ITROL: N IMPLEMEN	T DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL:	ECONOMIZER DB CON	ITROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL:	ECONOMIZER WB CON	ITROL: N TIM	E CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL: N			
OTHER CONTROLS DESCR:			
	CW control valve serves all 3	3 AHU's	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

BILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS DATE: 10/05/94
PREPARED BY: AJN/CWW

**BOILER AND CONVERTER SURVEY OBSERVATIONS** 

BUILDING NUMBER: 8025	BOILER RM LOCATION: MER						
BOILER UNIT							
SOURCE OF BLDG HEAT	BLR/CONVERTER SERVES AREA OR SERVICE: ALL						
SOURCE OF BEDGINEAT							
BOILER	CONVERTER						
BOILER TAG:	CONVERTER TAG: CV-1						
BOILER TYPE:	CONVERTER TYPE: STM TO HW CONV HT SOURCE:						
FUEL TYPE:	CONVITI SOURCE.						
© CENTRAL PLANT DIREC	T						
IAMEPLATE	% AREA HEATED BY BB RADIATION: 100						
BOILER MFG:	BLR CAP OUTPUT (BTUH): 780,000						
UNIT MODEL:	BLR CAP INPUT (BTUH): 0						
COMMENTS:							
COMMENTS.							
SCHEDULE							
DAYS SCHEDULE NO: 3	MONTH SECHDULE NO: 1						
DAYS SCHEDULE NO: 3	MONTH SECTIONE 1						
	ON: TUE: WED: THUR: FRI: SAT:						
PRES START: 0	0 0 0 0 0						
PRES STOP: 24	24 24 24 24 24						
REQ START: 0	9 7 9 7 9 0						
REQ STOP: 0	18 18 18 18 0						
MONTHS JAN: FEB: MA	R: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:						
ON:							
CONTROLS							
TYPE OF BLR CONTRO	DLS: PNEUMATIC RESET CONTROLS: Y						
OPERATING SETPO							
TYPE OF BURNER CONTRO	DLS:						
CONTROLS COMME	JTS:						
CONTINUED COMME	119						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/05/94

PREPARED BY: AJN/CWW

### PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBFR:	8025				BLDG N	JAME:	BN ADM	IN & CU	RM.			
		VI TAG) NO	): RAD	-1	·			YS LOCA			Mariaban		
	•	HEATING	2000 A 1000					SERVES	-				
	ONOL OI	HEATING	J. UV-				•	DEIXVES A	AINEA.	ALL	-	_	
RAI	NOITAIC	UNIT TYPE	E: HW					% AREA	HTG:	-		0	
RADIA	TION	PUM	>	====									
PUMP	TAG: 1		:	PUN	/IP HP:	1	1.5	PUMF	MFG:	GOULD			
								PUMP M	ODEL:	179260			
SCHEE	ULE												
DA	YS SCH	EDULE NO	):	3′	1	MOI	NTHS SC	CHEDULE	NO:		1.		
SCH	EDULE C	OMMENTS	S:										
		SUN:	MON:	TUE	: WE	D: TH	IUR:	FRI:	SAT:				
PRES S		0	0	(	<u> </u>	0	0	0	0				
	STOP:	24	24	24	<u> </u>	24	24	24	24				:
	TART:	0	9		7 -	9		9	0				:
REQ	STOP:	0	18	18	<u> </u>	18	18	18	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	ост:	NOV:	DEC:	
ON:	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$							$\boxtimes$	$\boxtimes$	
CONT	ROLS												
TY	PE OF R	AD. CONT	ROLS:	PNEU	MATIC								
	RADIA	TION CON	ITROL:	NONE			-						
	ОС	C HT SPA	CE SP:		0								
		C HT SPA			0			F	ESET C	ONTROL:	N		
	CONTE	OL COMM	IENTO:										7
	CONTR	OL COMM	IEN 12:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/05/94

PREPARED BY: AJN/CWW

## REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 8025	BLDG NAME:	BN ADMIN & CLRM	
REF. UNIT NUMBER/TAG: CWP-1		LOCATION (ME	ER#):
		AHU'S SER	VED: AHU'S 1,2 & 3
UNIT TYPE CENTRAL	_ PLANT		
NAMEPLATE			
CHILLER MFG:		TOWER MFG:	
CHILLER MODEL:	#	OF TOWER FANS:	0
CHILLER SERIAL NO:		TOWER FAN V:	0
CHILLER V:	<u>0</u> T(	OWER FAN AMPS:	0
CHILLER AMPS:	0	TOWER FAN HP:	0
CHILLER PH:	0		
CHILLER CAP (TONS):	0		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE NO: 31		MONTHS SCHEDUL	E NO: 2
SCHEDULE COMMENTS:			
SUN: MON: TU	E: WED: THUR:	FRI: SAT:	
PRES START: 0 0	0 0 0	0 0	
	24 24 24	24 24	!
REQ START: 0 9	7 9 7	9 0	
REQ STOP: 0 18	18 18 18	18 0	
MONTHS JAN: FEB: MAR: APR:	MAY: JUN: JU	UL: AUG: SEP:	OCT: NOV: DEC:
ON: $\square$ $\square$ $\square$ $\square$			ппп
CONTROLS			
TYPE OF CONTROLS: ELECTRIC	<u> </u>		
CWC SETDOINT.	0	CNIME SETPOINT.	· · · · · · · · · · · · · · · · · · ·
CWS SETPOINT:	0	CNWS SETPOINT:	0
CWS SETPOINT:	0	CNWS SETPOINT: CNWR SETPOINT:	0
	<del></del>		0
CWR SETPOINT:	0 TEMP LITE HI:	CNWR SETPOINT:	0
CWR SETPOINT: PRESS LITE HI: N	0 TEMP LITE HI: [ TEMP LITE LOW: [	CNWR SETPOINT:  N OTHER IND	0
CWR SETPOINT:  PRESS LITE HI:  PRESS LITE LOW:  N	0 TEMP LITE HI: [ TEMP LITE LOW: [	CNWR SETPOINT:  N OTHER IND	0
CWR SETPOINT:  PRESS LITE HI: N  PRESS LITE LOW: N  PRESS GAUGES: N  CONTROLS COMMENTS:	0 TEMP LITE HI: [ TEMP LITE LOW: [	CNWR SETPOINT:  N OTHER IND	0
PRESS LITE HI: N PRESS LITE LOW: N PRESS GAUGES: N	TEMP LITE HI: [ TEMP LITE LOW: [ TEMP GAUGES: [	CNWR SETPOINT:  N OTHER IND  N	0

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY:

**CWW** 

CHECKED BY:

AJN

8025 BLDG: FILE: 8025.XLS AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS AHU NO.: AHU-1 LOCATION (Rm) MER AHU TYPE: MFG.: TRANE MODEL: MZ-6 SZ - Single Zone H&V - Heating & Vntltng. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe) MZ - Mulitzone VAV - Variable Air Vol. RHT - Reheat System DD - Dual Duct UH - Unit Heater IND - Induction System O.A. DAMPER N/A: OK: X REPLACE: SIZE: DPR-ACT RP- ACT: OK: X R.A. DAMPER N/A: OK: X REPLACE: SIZE: DPR-ACT OK: RP- ACT: E.A. DAMPER N/A: X OK: REPLACE: SIZE DPR-ACT OK: RP-ACT: F. & B. DAMPER N/A: X OK: REPLACE: DPR-ACT SIZE: OK: RP-ACT: ZONE DAMPER N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X RP- ACT: RA & OA INTERLOCKED. SMALL AMOUNT OF RUST ON AHU-3 COMMENTS: DPR-ACT = Damper Actuator BODY, 3 ZONES. RP-ACT = Replace Actuator FILTER SECTION N/A: OK: X REPLACE: SIZE: COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES COMMENTS: N/A: X RETURN AIR FAN REPLACE FAN BEARINGS: OK: COMMENTS: N/A RETURN FAN MOTOR REPLACE: OK: COMMENTS: COMMENTS: COOLING COIL N/A: OK: X REPLACE: SIZE: CNTLVLV OK: X RP- ACT: RP-BD: OK: HEATING COIL N/A: X REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BD: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BD: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BD: COMMENTS: ONE VALVE FOR ALL THREE AHU'S RP-ACT = Replace Actuator RP-BD = Replace Body AHU PUMP MOTOR N/A: OK: X REPLACE: SIZE: AHU PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY: DUCT INSULATION N/A: X OK: ESTIMATED QUANTITY: MISSING: COMMENTS: *6'- 2-1/2" @ PUMP, 6' 2" @ COIL

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: 7 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

	AID	LIANDI INI	BLDG: G UNIT - HVA	8025	OBSEDI/V.	FILE:	8025.XLS	
N.II.MO					OBSERVA	HONS		
AHU NO.: AHU TYPE:	AHU-2 MZ	LOCATION MFG.:	TRANE	`	MODEL:	MZ-10	·	
		ating & Vntltng		Fan Coil (Indicate			۵۱	
SZ - Single Zone MZ - Mulitzone		iable Air Vol.	1	- Reheat System	21 101 2 1 1pe 01	קו ודיוטו וד	<del>5</del> )	
DD - Dual Duct	UH - Unit			- Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	_ ***
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
ZONE DAMPER (6)	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
COMMENTS:		DAMPERS IN					DPR-ACT = Damp	er Actuator
SOMMETTO.			RTY, ~ 10% AIR LEA	KAGE 6 ZONES			RP-ACT = Replace	
	0/(0/11/11	LICYLIC DI	10707070					
FILTER SECTION	N/A:	JOK: X	REPLACE:	SIZE:		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
COMMENTS:				L		,		
001111121110.						*****		
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:	····		
INLET VANES	N/A: X	IOK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE						
COMMENTS:						<del></del>	· · · · · · · · · · · · · · · · · · ·	
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	ок:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:						, , , , , , , , , , , , , , , , , , , ,	RP-ACT = Replace	Actuator
	,						RP-BD = Replace	Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
PIPE INSULATION	N/A:	OK:	MISSING: X		ED QUANTITY		3' @2"	
	N/A:	OK: X	MISSING:	ESTIMAT	TED QUANTITY	:		
DUCT INSULATION	11							

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE: 8025.XLS

	AIR	HANDLIN	G UNIT - HVAC	UPGRADE	OBSERVA	TIONS		
AHU NO.:	AHU-3	LOCATIO	N (Rm) MER		, , , , , , , , , , , , , , , , , , ,			
AHU TYPE:	MZ	MFG.:	TRANE		MODEL:	MZ-6		
SZ - Single Zone	H&V - Hea	ating & Vntltng	j. FC - F	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	oe)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - I	nduction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
COMMENTS:	RA AND (	DA INTERLO	CKED. DIRTY. 10% AI	R LEAKAGE.			DPR-ACT = Damp	er Actuator
	AHU - CA	SING IS RUS	TY, 3 ZONES.	W			RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMEN	NTS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	NTS:			
COMMENTS:								
COOLING COIL	N/A:	OK: X	IDEDLACE:	IOIZE.	CNITIVIN	TOK. V	IDD ACT.	Inn nn
HEATING COIL	N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:		SIZE: SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	IN/A. A	JON.	INEPLACE.	SIZE.	CNILVLV	Jon.		
COMMENTS:							RP-ACT = Replace	
··	******	<del></del>		· · · · · · · · · · · · · · · · · · ·			RP-BD = Replace	Body
1191511119110700	Thur.	lov	Inchi (Se	Ia				
	N/A:	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: N/A:	OK: OK:	REPLACE:	SIZE: SIZE:				
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:			•	L L				
AHU PUMP SEALS COMMENTS:	N/A:	OK:	REPLACE:	SIZE:	ED OLIANTITY			
AHU PUMP SEALS			•	SIZE:	ED QUANTITY:			

8025

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

8025

FILE:

BOILER/CONVERTER NO		CV-1	LOCATION (RM)	MER	OBSERVATIONS
BOILER TYPE:	<i>)</i> .	0 4-1	MFG.:	IVILIA	MODEL:
CONVERTER TYPE:		STM/HW		MINION STEEL	MODEL: BUILT IN 1976
STM - Steam	STM/HW	- Steam to Hot			I - High Temp HW to Steam Convertor
HW - Hot Water			. HW to HW Cv.	i	nestic Hot Water Convertor
BOILER BURNER	ATMOSP		POWER:	OK:	REPLACE:
COMMENTS:			CONVERTER		
	· · ·	0.540.			
	····				
BLR PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A:	ОК:	REPLACE:	SIZE:	
COMMENTS:					
	76.77	Tov	IMICOINO	ICOTUANTO	D. OLIANTITY.
BLR INSULATION	N/A:	OK:	MISSING:		D QUANTITY:
PIPE INSULATION	N/A:	OK:	MISSING:		D QUANTITY:
COMMENTS:			N: MANUAL SHUT-OFF		
			MISSING - CLASS ROOM		
			S INSUFFICIENT FOR I		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE: SIZE:	
HW PUMP SEALS	N/A:				
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE: SIZE:	**************************************
HW PUMP SEALS	N/A:	OK:	REPLACE:		
HW PUMP MOTOR	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:	
HW PUMP SEALS		OK:		SIZE:	
HW PUMP MOTOR	N/A: N/A:	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	IN/A.	JON.	IREPLACE.	SIZE.	
COMMENTS:					
				TWO .	
	N/A·	IOK: X	REDIACE:	ISIZE:	
CV PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CV PUMP SEALS	N/A: N/A:	OK: X OK: X	REPLACE:	SIZE: SIZE:	
CV PUMP SEALS					
CV PUMP SEALS COMMENTS:	N/A:	OK: X	REPLACE:	SIZE:	D QUANTITY:
CV PUMP SEALS				SIZE:	D QUANTITY:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/4/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

**BUILDING DATA SURVEY OBSERVATIONS** 

**BLDG NUMBER: 0003** 

**BLDG NAME: POST CHAPEL** 

ELECTRIC METER: N GAS METER: N

SUSPECT ACM: N

CONDITIONED SQFT:

**BUILDING OCCUPANCY SCHEDULE** 

BUILDING SCHDULE NO:

SUN: MON: TUE: WED: THUR: FRI: 0 0 0 0 0 0 24 24 24 24 24 24 24

9 9 9 9 9 REQ START: 8 9 22 22 16 16 16 16 REQ STOP:

**REMARKS:** 

PRES START:

PRES STOP:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/4/94 PREPARED BY: AJN/CWW

### AIR HANDLING UNIT SURVEY OBSERVATIONS

	BUILDING NUMBE AHU NUMBE					AHU L	OCATIO	N: MER				-
	555510 01/0 # 551 # 10				_							-
	REFRIG SYS # SRVNG A	.HU:		% C	F BLDG	SERVES AREA H					0	
	AHU UNIT TYPE SING	LE ZONE					N	IUMBER (	OF ZON	ES IF MZ	UNIT:	0
	CFM-HTG			0		Ci	M-CLG	. —		4,800		<del></del>
	MIN %OA			15			020 X %OA			15		
١	NAMEPLATE	<u> </u>				••••	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•				
	UNIT MFG	COME	ORT AIRI				111	NIT MODE	1 - 214	/90-3BA		
	SUPPLY FAN HP	***	<del></del>	0.75				XH FAN H		190-3DA	0	
	SUPPLY FAN MTR MFG	<del></del>		<u> </u>		DET/		N MTR MF				
	SUPPLY FAN MTR MODEL COMMENTS			<del></del>		KE 1/EXF	TANM	TR MODE				
	COILS											
_	Coil	<del></del>	Coil Type	e		Mo	dulating	g Valve?				
	PREHEAT COIL					님						
	HEATING COIL											
	REHEAT COIL					닏						
	HUMIDIFIER					:						
	COOLING COIL	: DX										
S	CHEDULE											
	DAY SCHEDULE NO:	40						MONT	H SCH	EDULE NO	o:	2
	SCHEDULE COMMENTS:											
	SUN:	MON:	TUE:	WE	D: TH	UR:	FRI:	SAT:				
	PRES START: 0	0	. 0		0	0	0	0				
	PRES STOP: 24	24	24		24	24	24	24				
	REQ START: 8	9	9		9	9	9	9				•
	REQ STOP: 22	16	16		<u> </u>	16	16	12				1
								<u></u>				
ı	MONTHS JAN: FEB: ON:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	<del>-</del> .
_				$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$				:
	CONTROLS											
	TYPE OF CON	TROLS:	ELECTF	RIC			THER	MOSTAT	TYPE:	SINGLE	SETPOIN	Γ
	PRESENT TEMP WINT	'B 000			0		но	T DECK D	EG F:		(	)
	PRESENT TEMP WINTR I				<del></del>		COL	D DECK D	EG F:			<u>)</u> .
	1 VEOCIAL LEINIE ANIIALK (	,HOCC:			<u> </u>		MIX	KED AIR D	EG F:		(	)
	PRESENT TEMP SU	M OCC:			60	OTHE	R SETP	OINT DES	CRIP:			
	PRESENT TEMP SUM (	JNOCC:			0	ОТІ	HER SE	TPOINT D	EG F:		(	<u>.</u>
	MIN OA DMPR CONTRO	L: N	RA1V	'ED AII	םם את כ	CONTRO	L: N	] IMDIE	MENT	DEMAND	I IMIT CHI	rrls? [
	MAX OA DMPR CONTRO							<b>=</b>	IASETAL T	PEIMANU		
						CONTRO		₹	71247		TIME CI	<b>:</b>
	RET AIR DMPR CONTRO		ECC	MUMIZ	EK MB	CONTRO	L: N	T	IIME	CLOCK C	PEKATIC	MAL? [
	EXH AIR DMPR CONTRO	L: N										
	OTHER CONTROLS											
	CONTROL COM	445-1450										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/4/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

## AIR HANDLING UNIT SURVEY OBSERVATIONS

711111	THE ENTE OF THE O		
BUILDING NUMBER		AHU LOCATION: MER	
REFRIG SYS # SRVNG AF	W	SERVES AREA: ALL DG AREA HEATED:	100
AHU UNIT TYPE FAN O	NLY	NUMBER OF	ZONES IF MZ UNIT: 0
CFM-HTG:	5,000	CFM-CLG:	0
MIN %OA:	15	MAX %OA:	15
NAMEPLATE			
UNIT MFG:	CLARAGE FAN COMPANY	UNIT MODEL	: S: 85454
SUPPLY FAN HP:	0	RET/EXH FAN HP	: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG	:
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL:	NONE		
HUMIDIFIER:	<u> </u>		•
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	40	MONTH	SCHEDULE NO: 1
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	·
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 8	9 9 9	9 9 9	
REQ STOP: 22	16 16 22	16 16 12	
MONTHS JAN: FEB:	MAR: APR: MAY: JUI	N: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			i
CONTROLS			
TYPE OF CONT	rrols: ELECTRIC	THERMOSTAT T	
PRESENT TEMP WINT	R OCC: 0	COLD DECK DE	
PRESENT TEMP WINTR U	INOCC: 0		
		MIXED AIR DE	
PRESENT TEMP SUI PRESENT TEMP SUM U		OTHER SETPOINT DESC	
MIN OF DEED CONTROL	. N MIVED AID DA	PR CONTROL: N IMPLEN	MENT DEMAND LIMIT CNTRLS?
MIN OA DMPR CONTROL		<del></del>	TIME CLOCK:
MAX OA DMPR CONTROL	<b></b>	<b></b>	TIME CLOCK OPERATIONAL?
RET AIR DMPR CONTROI EXH AIR DMPR CONTROI	<b></b>	WB CONTROL: N	TIME CLOCK OPERA HUNAL?
OTHER CONTROLS			
	MENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/4/94

PREPARED BY: AJN/CWW

### **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING N	JMBER: 0003			BOILER RM LOC	ATION:	MER	
<b>BOILER UI</b>	VIT						
SOURCE OF	BLDG HEAT	BLR/CONVER	TER SERVES AR	EA OR SERVICE:	ALL		
● 🔀 BOIL	<u>ER</u>		<u>c</u>	ONVERTER			<del></del>
	R TAG: BLR-1			IVERTER TAG:			
4		SS STEAM (15# TO	125#) CON	VERTER TYPE:			
FUEI	- TYPE: NAT. GAS		CON	V HT SOURCE:			
CENTRA	L PLANT DIRECT						i ·
NAMEPLA	TE		% AREA HE	ATED BY BB RAI	DIATION:		
BOILER MFG:	KEWANEE		BLR C	AP OUTPUT (BTU	IH):		600,000
UNIT MODEL:	8656			CAP INPUT (BTU			750,000
COMMENTS:							
0011501111							
SCHEDULI	_						
DAYS SCHEDU SCHEDULE COMI				MONTI	H SECHD	ULE NO:	1
	SUN: MON	TUE: W	ED: THUR:	FRI: SAT:			
PRES START:	0 0		0 0	0 0			:
PRES STOP:	2424		24 24	2424			
REQ START:	8 9		9 9	9 9			
REQ STOP:	22 16	16	22 16	16 12			
MONTHS JAN	FEB: MAR:	APR: MAY:	JUN: JUL:	AUG: SEP:	ост:	NOV:	DEC:
ON: ☑					$\boxtimes$	$\boxtimes$	
CONTROL	S						
OPER	F BLR CONTROLS: ATING SETPOINT: RNER CONTROLS:		7 DEG F or PSIG	RESE	T CONTR	ROLS:	N
	ROLS COMMENTS:		:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

FILE:

13 Nov-94

PREPARED BY:

3.XLS

CWW AJN

CHECKED BY:

NO.:	AHU-1	LOCATIO	\ /	ENT MER				
AHU TYPE:	SZ	MFG.:	COMFORT AIRE		MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntitng	· · · · · · · · · · · · · · · · · · ·	•	2P for 2 Pipe or	4P for 4 Pip	oe)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	t .	leheat System				
DD - Dual Duct	UH - Unit	Heater	IND - In	duction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	CENTRAL	COOLING A	IR CONDITIONER (2) CO	OMPRESSORS			DPR-ACT = Dampe	r Actuator
	B/M NO. 5	5102-8-18A					RP-ACT = Replace	Actuator
	ASBESTO	)S FREE						
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK:	REPLACE	: X	COMMEN	ITS:			
INLET VANES	N/A:	OK: X	COMMENTS:	MANUAL	SETTING			
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS: N/A	****		
RETURN FAN MOTOR	OK:	REPLACE	•	COMMEN	ITS: OLD			
COMMENTS:		IS 12" X 18"			· · · · · · · · · · · · · · · · · · ·			
001111211101					· · · · · · · · · · · · · · · · · · ·			
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
MEATING COIL		ОК:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
	IIN/A: X	IUK:					RP- ACT:	RP-BD
PREHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	pra - 701.	
PREHEAT COIL REHEAT COIL	N/A: X	ок:	REPLACE:	SIZE:	CNTLVLV	JOK:	RP-ACT = Replace	Actuator
PREHEAT COIL REHEAT COIL	N/A: X H&V UNIT	OK: CONNECTE		SIZE:	CNTLVLV	JOK:	<del></del>	-
PREHEAT COIL REHEAT COIL	N/A: X H&V UNIT	OK: CONNECTE	REPLACE: D TO SINGLE ZONE AH	SIZE:	CNTLVLV	јок:	RP-ACT = Replace	-
PREHEAT COIL REHEAT COIL	N/A: X H&V UNIT	OK: CONNECTE	REPLACE: D TO SINGLE ZONE AH	SIZE:	CNTLVLV	JOK:	RP-ACT = Replace	-
PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X H&V UNIT	OK: CONNECTE	REPLACE: D TO SINGLE ZONE AH	SIZE:	CNTLVLV	JOK:	RP-ACT = Replace	-
PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X H&V UNIT HEATING	OK: CONNECTE COIL IS LAR	REPLACE: D TO SINGLE ZONE AH GE CAST IRON RADIAT	SIZE: IU OR	CNTLVLV	JOK:	RP-ACT = Replace	-
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X H&V UNIT HEATING	OK: I CONNECTE I COIL IS LAR	REPLACE:  D TO SINGLE ZONE AH GE CAST IRON RADIAT  REPLACE:	SIZE: OR SIZE:	CNTLVLV	<u>  OK:</u>	RP-ACT = Replace	-
PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X H&V UNIT HEATING	OK: I CONNECTE I COIL IS LAR	REPLACE:  D TO SINGLE ZONE AH GE CAST IRON RADIAT  REPLACE:	SIZE: OR SIZE:	CNTLVLV	<u>  OK:</u>	RP-ACT = Replace	-
PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS	N/A: X H&V UNIT HEATING	OK: I CONNECTE I COIL IS LAR	REPLACE:  D TO SINGLE ZONE AH GE CAST IRON RADIAT  REPLACE:	SIZE: OR SIZE:	CNTLVLV	<u>  OK:</u>	RP-ACT = Replace	-
PREHEAT COIL REHEAT COIL COMMENTS:  AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X H&V UNIT HEATING  N/A: X N/A: X	OK: T CONNECTE COIL IS LAR OK: OK:	REPLACE:  D TO SINGLE ZONE AH GE CAST IRON RADIAT  REPLACE: REPLACE:	SIZE:  U OR  SIZE:  SIZE:	CNTLVLV  ED QUANTITY:		RP-ACT = Replace	-
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: X H&V UNIT HEATING	OK: I CONNECTE I COIL IS LAR	REPLACE:  D TO SINGLE ZONE AH GE CAST IRON RADIAT  REPLACE:	SIZE:  U OR  SIZE:  SIZE:  SIZE:			RP-ACT = Replace	-

3

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 12 Nov-94

CHECKED BY:

CWW AJN

BLDG:

3

FILE:

CHILLER / EQUIP. NO. REFG. EQUIP. TYPE:		011.4			ADE OBSERVATIONS
KEEG FOUR TYPE		CH-1	LOCATION (RM)	OUTSIDE	Logny, Angeles
	M-1 011 0	CT	1	EY AQUATOWER	SERIAL: 4715663
C-WCT = Centrifugal w/ \		-		, ,	w/ Air Cooled Condensing Unit
R-WCT = Reciprocating		Cooling Lowe		•	w/ Water Side Cooling Tower
ACCU = Air Cooled Cond		Tou		Cooling Tower	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE: SIZE:	
					2/4 UD
CT/ACCU FAN MTR	N/A: N/A:	OK: X	REPLACE:	SIZE:	3/4 HP
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
	IN/A:	JUN:	REPLACE:	SIZE:	
COMMENTS:					
COOLING TOWER	INT/A	Tov	IDED AGE V	louze	
COOLING TOWER	N/A:	OK:	REPLACE: X	SIZE:	
AIR COOLED COND.	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:				···	
CHILLER INSUL.	N/A:	OK:	MISSING:		D QUANTITY:
CHW PIPE INSUL. COMMENTS:	N/A:	јок:	MISSING:	ESTIMATE	D QUANTITY:
COMMENTS:  CNW PUMP MOTOR	N/A:	ок: х	REPLACE:	SIZE:	D QUANTITY:  METER NOT BOLTED TO ANYTHING
COMMENTS:					
CNW PUMP MOTOR CNW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A:	OK: X OK: X	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
COMMENTS:  CNW PUMP MOTOR CNW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	
CNW PUMP MOTOR CNW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
COMMENTS:  CNW PUMP MOTOR CNW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
CNW PUMP MOTOR CNW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 12 Nov-94

CHECKED BY:

CWW AJN

3

BLDG:

FILE: 3.XLS

DOU ED/00:	BUIL			UPGRADE OBSERVATIONS
BOILER/CONVERTER 1	10.	BLR-1	LOCATION (RM)	BASEMENT MER
BOILER TYPE:		STM	MFG.: KEWA	NEE MODEL: TYPE R
CONVERTER TYPE:			MFG.:	MODEL:
STM - Steam			ot Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water			np. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER		PHERIC: X	POWER:	OK: X REPLACE:
COMMENTS:	OLD CO	NVERTED CO	DAL BURNER	
	·			
BLR PUMP MOTOR	N/A: X	Torr	IDEDI AGE	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:	IVA. A	JOK.	REPLACE:	SIZE:
COMMENTS.				
	<del></del>		<del></del>	
BLR INSULATION	N/A:	JOK: X	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A:	OK: X	MISSING:	
COMMENTS:	IV/A.	JOIN. X	IVIIOSIING.	ESTIMATED QUANTITY:
JOHNIERTO.		<del></del>		
		<del></del>		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	CIZE
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE: SIZE:
HW PUMP MOTOR	N/A: X	Jok:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:			1.12. 2.102.	OIZE.
V PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
V PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
OMMENTS:				
	IINIA V	OK:	MISSING:	ESTIMATED QUANTITY:
V INSULATION	N/A: X	1011		, — - · · · · · · · · · · · · · · · · · ·
V INSULATION V PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

**DATE**: 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

### **BUILDING DATA SURVEY OBSERVATIONS**

BLDG NUMBER: 7086 BLDG NAME: UNIT CHAPEL

ELECTRIC METER: N
GAS METER: N

SUSPECT ACM: Y

CONDITIONED SQFT:

8,696

**BUILDING OCCUPANCY SCHEDULE** 

BUILDING SCHDULE NO: 35

FRI: SAT: MON: TUE: WED: THUR: SUN: 0 0 PRES START: 0 0 24 24 24 24 24 PRES STOP: REQ START: 0 10 0 0 0 0 9 0 0 13 0 0 0 REQ STOP: 14

**REMARKS:** 

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

**DATE:** 10/13/94 PREPARED BY: AJN/CWW

## AIR HANDLING UNIT SURVEY OBSERVATIONS

711111111111111111111111111111111111111	O OIIII OOKVET ODG	
BUILDING NUMBER: 7086		
AHU NUMBER: AHU-1	AHU LOCATION	: MER BASEMENT
REFRIG SYS # SRVNG AHU: CH-1	SERVES AREA:	SANCTUARY
<u>.                                    </u>	% OF BLDG AREA HEATED:	67
AHU UNIT TYPE SINGLE ZONE	NU	MBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	5,400 <b>CFM-CLG</b> :	5,400
MIN %OA:	30 MAX %OA:	100
NAMEPLATE		
UNIT MFG:	UNI	T MODEL:
SUPPLY FAN HP:		FAN HP: 0
SUPPLY FAN MTR MFG: GE	RET/EXH FAN N	MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTF	R MODEL:
COMMENTS:	<del></del>	Marrier a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate and a samurate an
COILS		
Coil Coil 1	Type Modulating \	Valve?
PREHEAT COIL: NONE		
HEATING COIL: HOT WATER	₹	
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: DX		
SCHEDULE		
DAY SCHEDULE NO: 35		MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		MONTH SCHEDULE NO. 3
SUN: MON: TU	JE: WED: THUR: FRI: S	SAT:
PRES START: 0 0	0 0 0 0	0.
PRES STOP: 24 24	24 24 24 24	24
REQ START: 9 0	0 0 0 0	10
REQ STOP: 14 0	0 0 0 0	13
MONTHS JAN: FEB: MAR: APR	MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON:		1
CONTROLS		
TYPE OF CONTROLS: PNE		OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0	DECK DEG F: 0 D AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPOL	
PRESENT TEMP SUM UNOCC:	0 OTHER SETPO	
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: Y	IMPLEMENT DEMAND LIMIT CNTRLS?
	ECONOMIZER DB CONTROL: N	TIME CLOCK:
EXH AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL?
EAR AIR DIVIER CONTROL: [N]		
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS: Face	& Bypass dampers	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

### AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER	: 7086		
AHU NUMBER	: FC-1	AHU LOCATION: THROUGHOUT OF	FICE AREA
REFRIG SYS # SRVNG AH	ıu·	SERVES AREA: ADMIN OFFICE	
REPROSTO # SICILO 7		S AREA HEATED:	33
AHU UNIT TYPE FAN C	OILS - 2 PIPE	NUMBER OF ZONES IF	MZ UNIT: 0
			-
CFM-HTG:	3,300	CFM-CLG: 3,300 MAX %OA: 20	<b>=</b>
MIN %OA:	20	MAX %UA:	<u>)</u>
NAMEPLATE			
UNIT MFG:	MODINE	UNIT MODEL: CS90	
SUPPLY FAN HP:	0.75	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	HOT WATER	$\boxtimes$	
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	34	MONTH SCHEDUL	E NO: 3
SCHEDULE COMMENTS:		MONTH CONEDUL	
SUN:		IUR: FRI: SAT:	
PRES START:0	0 0 0	0 0 0	:
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 9	9 9 9 =	9 9 10	
REQ STOP: 14	17 17 17	<u> 17</u> <u> 13</u>	
MONTHS JAN: FEB: I	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NO	V: DEC:
ON:			
CONTROLS			
	DOLE: ELECTRIC	THEDMOSTAT TYPE: SING	ELE SETPOINT
TYPE OF CONT		THERMOSTAT TYPE: SING	GLE SETPOINT
		HOT DECK DEG F:	
TYPE OF CONT	ROCC: 0		0
TYPE OF CONT PRESENT TEMP WINTR U	R OCC: 0	HOT DECK DEG F: COLD DECK DEG F:	0
TYPE OF CONT	R OCC: 0 NOCC: 0	HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F:	0
TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE UI PRESENT TEMP SUM PRESENT TEMP SUM UI	R OCC: 0 NOCC: 0 NOCC: 0 NOCC: 0	HOT DECK DEG F:  COLD DECK DEG F:  MIXED AIR DEG F:  OTHER SETPOINT DESCRIP:  OTHER SETPOINT DEG F:	0 0 0 0
TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTR UI PRESENT TEMP SUM PRESENT TEMP SUM UI MIN OA DMPR CONTROL	R OCC: 0  NOCC: 0  NOCC: 0  NOCC: 0  NOCC: 0	HOT DECK DEG F:  COLD DECK DEG F:  MIXED AIR DEG F:  OTHER SETPOINT DESCRIP:  OTHER SETPOINT DEG F:  CONTROL: N IMPLEMENT DEMA	0 0 0 0
TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTR UI PRESENT TEMP SUM PRESENT TEMP SUM UI MIN OA DMPR CONTROL MAX OA DMPR CONTROL	R OCC: 0  NOCC: 0  NOCC: 0  NOCC: 0  NOCC: 0  MIXED AIR DMPR  IN ECONOMIZER DB	HOT DECK DEG F:  COLD DECK DEG F:  MIXED AIR DEG F:  OTHER SETPOINT DESCRIP:  OTHER SETPOINT DEG F:  CONTROL: N IMPLEMENT DEMA	0 0 0 0 ND LIMIT CNTRLS? N TIME CLOCK: N
TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTR UI PRESENT TEMP SUM PRESENT TEMP SUM UI MIN OA DMPR CONTROL	R OCC:	HOT DECK DEG F:  COLD DECK DEG F:  MIXED AIR DEG F:  OTHER SETPOINT DESCRIP:  OTHER SETPOINT DEG F:  CONTROL: N IMPLEMENT DEMA	0 0 0 0 ND LIMIT CNTRLS? N TIME CLOCK: N
TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTR UI PRESENT TEMP SUM PRESENT TEMP SUM UI MIN OA DMPR CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL	R OCC:	HOT DECK DEG F:  COLD DECK DEG F:  MIXED AIR DEG F:  OTHER SETPOINT DESCRIP:  OTHER SETPOINT DEG F:  CONTROL: N IMPLEMENT DEMA	0 0 0 0 ND LIMIT CNTRLS? N TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE**: 10/13/94

PREPARED BY: AJN/CWW

## **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMBER	R: 7086		BOILER RM LOC	ATION:	MER		
BOILER UNIT							
		/ERTER SERVES ARE	A OR SERVICE:	ALL			
SOURCE OF BLDG	HEAT						
BOILER			ONVERTER				
BOILER TAG		CON	VERTER TAG:				
BOILER TYPE			ERTER TYPE:				:
FUEL TYPE	E: NAT. GAS	CON	/ HT SOURCE:				
CENTRAL PLAN	NT DIRECT						
IAMEPLATE		% AREA HE	ATED BY BB RAI	DIATION:			0
BOILER MFG: BURN	HAM	BLR C	AP OUTPUT (BTU	'H):		907,000	
UNIT MODEL: EW-30		MAC)	CAP INPUT (BTU	<del></del>		1,308,000	
COMMENTS:							
CHEDULE							
DAYS SCHEDULE NO	); 34		MONT	1 SECUL	ULE NO:	. 1	-
CHEDULE COMMENTS			MOITT	T OLOTE	OLL NO.	1	
SI	JN: MON: TUE:	WED: THUR:	FRI: SAT:				
PRES START:	0 0 0	0 0	0 0				
PRES STOP:	24 24 24	24 24	24 24				
REQ START:	9 9 9	9 9	9 10				
REQ STOP:	14 17 17	17 17	17 13			:	
MONTHS JAN: FE	B: MAR: APR: M	IAY: JUN: JUL:	AUG: SEP:	OCT:	NOV:	DEC:	
ON: 🖂 [				$\boxtimes$	$\boxtimes$	$\boxtimes$	
CONTROLS							
TYPE OF BLR	CONTROLS: ELECTRIC	C	RESE	T CONTR	ROLS:	Y	
OPERATING	SETPOINT:	172 DEG F or PSIG			_		
TYPE OF BURNER	CONTROLS:						
CONTROLS	COMMENTS:						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: AJN/CWW

# **BOILER AND CONVERTER SURVEY OBSERVATIONS**

BUILDING NUMB	ER: 7086	BOILER RM LOCATION: MER	
<b>BOILER UNIT</b>	•		
		ER SERVES AREA OR SERVICE:	:
SOURCE OF BLD			
BOILER		CONVERTER	
BOILER TA	AG:	CONVERTER TAG:	
BOILER TY	PE:	CONVERTER TYPE:	
FUEL TY	PE:	CONV HT SOURCE:	
CENTRAL PL	ANT DIRECT		
NAMEPLATE		% AREA HEATED BY BB RADIATION:	
BOILER MFG:		BLR CAP OUTPUT (BTUH):	
UNIT MODEL:		BLR CAP INPUT (BTUH):	
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE I		MONTH SECHDULE N	0: 2
PRES START: PRES STOP: REQ START: REQ STOP:	SUN:         MON:         TUE:         WE           0         0         0           24         24         24           9         9         9           14         17         17	ED: THUR: FRI: SAT:  0 0 0 0 24 24 24 24 9 9 9 10 17 17 17 13	
MONTHS JAN: ON:	FEB: MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV	DEC:
CONTROLS			
	R CONTROLS: ELECTRIC NG SETPOINT: R CONTROLS:	RESET CONTROLS: DEG F or PSIG	N
CONTROL	S COMMENTS:		
HW PUMP			
PUMP TAG: 1	PUMP HP:	1.5 PUMP MFG: CENTURY	
PUMP SERVICE: D	UAL TEMP PUMP	PUMP MODEL: 8-164733-2	20
HW PUMP			
PUMP TAG: 2	PUMP HP:	0.75 PUMP MFG: BELL & GO	DSSETT
PUMP SERVICE: D	UAL TEMP PUMP	PUMP MODEL: MOT 148-8	}

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94
PREPARED BY: AJN/CWW

### REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 70	86		BLDC	NAME:	UNIT	CHAPE	L			
REF. UNIT NUMBER/T.	AG: CH	<del></del> -1	<del></del>			LOCAT	TION (ME	R#): O	UTSIDE	
							U'S SERV		HU-1	
U	NIT TYPE	RECIPRO	CATING W	/ITH AIR	COOLE	D CONE	DENSING	UNIT		
NAMEPLATE										
CHILLER MFC	: TSI					TOWER	MFG:			
CHILLER MODE	.: 502CI	D20S			# OF T	OWER F	ANS:			4
CHILLER SERIAL NO	): 6-86-1	11606-1			T	OWER F	AN V:			208
CHILLER \	/:		208		TOWE	R FAN A	MPS:			2.4
CHILLER AMPS	S:		14.8		TO	WER FA	N HP:			0.5
CHILLER PH			3							
CHILLER CAP (TONS	):		20							
COMMENTS	3:									
SCHEDULE										
DAYS SCHEDU SCHEDULE COMM		35			MO	NTHS SC	CHEDULE	E NO:	2	
PRES START: PRES STOP: REQ START: REQ STOP:	JN: M 0 24 9 14	ON: TUE  0 (0 24 24 0 (0 0 (0	) ( 4 24 ) (	1 2	R: 0 24 0 0	FRI: 0 24 0 0	SAT: 0 24 10 13			
	B: MA	R: APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:			Σ.	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$			
CONTROLS										
TYPE OF COM	ITROLS:	ELECTRIC								
CWS SE	TPOINT:			0	CN	WS SET	POINT:			0
CWR SE	TPOINT:			0	CN	WR SET	POINT:			0
PRESS LI PRESS (	AUGES:	N	TEMP LIT	LITE HI: E LOW: AUGES:	N N N	ОТН	IER INDI	CATIOR	S:	
CONTROLS	COMMEN	ITS:								;

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

**DATE:** 10/13/94

PREPARED BY: AJN/CWW

### REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7086	3	BLDG NAME	: UNIT CH	APEL			
REF. UNIT NUMBER/TAG	i: CH-2	1	LC	CATION (N	/IER#): M	ER	
					RVED: F	C-1	
UNIT	TYPE RECIPROCA	ATING WITH AIR	COOLED	ONDENSIN	IG UNIT		
NAMEPLATE							
CHILLER MFG:	COPELAMETIC		TOV	VER MFG:	TSI		
CHILLER MODEL:	9RC1-1010		# OF TOW	ER FANS:			1
CHILLER SERIAL NO:	STC 82A -01421		TOW	ER FAN V:	<u></u>		208
CHILLER V:	2	08	TOWER FA	AN AMPS:			2.4
CHILLER AMPS:	42	2.8	TOWER	R FAN HP:			0.5
CHILLER PH:		3					
CHILLER CAP (TONS):		10					
COMMENTS:							
SCHEDULE							
DAYS SCHEDULE SCHEDULE COMME			MONTH	IS SCHEDU	LE NO:	2	
PRES STOP: 2 REQ START:	0 0 0	WED: THU  0  24  9  17	R: FRI	0 4 24 9 10			
MONTHS JAN: FEB	MAR: APR:	MAY: JUN:	JUL: A	JG: SEP	: OCT:	NOV:	DEC:
ON:				3 🗵			
CONTROLS							
TYPE OF CONT	ROLS: ELECTRIC		1				
OMO SET	DOINT	40	CNIVACE	SETPOINT			0
CWS SET	<del></del>	<u>40'</u> 50		SETPOINT	<u> </u>		0
CWR SET		ວບ		JEIPUNI	•	<u> </u>	<u>u</u> ,
PRESS L	<u> </u>	TEMP LITE H		OTHER IN	DICATIOR	S:	
PRESS LITE	<u></u>	TEMP LITE LOW	=				
PRESS GA	UGES: N	TEMP GAUGES	: N				
CONTROLS CO	OMMENTS:						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

BLDG: **7086** FILE: 7086.XLS

	AIR	HANDLIN	G UNIT - HVAC (	JPGRADE	OBSERVA	TIONS		
AHU NO.:	AHU-1	LOCATIO	N (Rm) MER					
AHU TYPE:	SZ	MFG.:			MODEL:			
SZ - Single Zone	H&V - He	ating & Vntltng	J. FC - Fa	n Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	:)	
MZ - Mulitzone	·VAV - Vai	riable Air Vol.	RHT - I	Reheat System	ŕ	·	•	
DD - Dual Duct	UH - Unit	Heater	:IND - Ir	duction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	FACE CC	IL IS IN CLOS	SED POSITION. 100% (	OUTSIDE AIR, 0	% RETURN		DPR-ACT = Damp	er Actuator
	AIR.						RP-ACT = Replac	e Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:	FROM CO	ONTROLS SH	EET F & B DAMPER IS	MODULATED T	O SATISFY THE	RMOSTAT.		
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	ICOMMEN	JTS [.]			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
INLET VANES	N/A: X	IOK:	COMMENTS:	JOOININE	110.			
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		110/73		
COMMENTS:	Ort.	INCI DOL		COMME	110.			
OOMINE IVIO.	*********	·····						
	10							
COOLING COIL	N/A:	OK: X	DX	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	NONE	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	e Actuator
				· · ·			RP-BD = Replace	Body
AHU PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:				
AHU PUMP SEALS		OK: X		SIZE:				
COMMENTS:	WIRES E	XPOSED, MC	TOR NOT BOLTED DO	VN				5.5.0
	NAT/A	Tou	IL HOOLIGE Y	TEXE:				
DIDE INCLIATION		OK:	MISSING: X		ED QUANTITY:		15' @ 2-1/2	<u> </u>
	N/A:		True acces					
PIPE INSULATION DUCT INSULATION COMMENTS:	N/A: X	OK: IP UNINSULA	MISSING:	ESTIMAT	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7086

FILE:

	REFRIGE	RATION E	QUIPMENT - H	VAC UPGRADE OBS	ERVATIONS
CHILLER / EQUIP. NO.		CH-1,2	LOCATION (RM)	OUTSIDE	
REFG. EQUIP. TYPE:		R-ACCU	MFG.: TSI	MODEL:	502CD205/TAC-11
C-WCT = Centrifugal w/ \	Water Side C	ooling Tower		J = Reciprocating w/ Air Coole	
R-WCT = Reciprocating v	w/ Water Side	e Cooling Towe		CT = Absorption w/ Water Side	e Cooling Tower
ACCU = Air Cooled Cond	densing Unit		CT = Co	ooling Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:				AHU IN BASEMENT MER)	
		SMALL UNIT -			
COOLING TOWER	N/A:	OK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:					
CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY	
CHW PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY	Y:
		Joy.	IDEDI ACE.	SIZE:	
CHW PUMP MOTOR	N/A: X N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS		OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE:	
			REPLACE:	SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X	OK: OK:	REPLACE:	SIZE:	
			REPLACE:	SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE:	
		JON	INCHENCE.	DICL.	
COMMENTS:					
				***************************************	
<u> </u>					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7086

FILE:

			BLDG:	/080		FILE:	7086.XLS
	REFRIGE	RATION I	EQUIPME	NT - HVA	C UPGRADE OB	SERVATIO	ONS
CHILLER / EQUIP. NO.		CH-3	LOCATION	(RM)	MER BASEMENT		
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	REFRIG. S'	YST. CO. MODEL:	CHS-10W	
C-WCT = Centrifugal w/	Water Side Co	ooling Tower		R-ACCU = I	Reciprocating w/ Air Cool	ed Condensing	g Unit
R-WCT = Reciprocating	w/ Water Side	Cooling Towe	er	ASB-WCT =	= Absorption w/ Water Sig	de Cooling Tow	er
ACCU = Air Cooled Cond	densing Unit			CT = Coolin	g Tower	·	
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:		SIZE:		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:		······································
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:		
COMMENTS:	ACCU FOR	THIS CHILLE	ER IS SMALL	ONE OF TW	O OUTSIDE.		
		AN COILS ON					
COOLING TOWER	N/A: X	OK:	REPLACE:	····	SIZE:		
AIR COOLED COND.	N/A: X	OK:	REPLACE:		SIZE:		
COMMENTS:							
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
CHILLER INSUL.	N/A:	OK: X	MISSING:		ESTIMATED QUANTIT	Υ:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	X	ESTIMATED QUANTIT	<u> Y</u> :	~50' OF 2-1/2"
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:		
CHW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:	·	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:		
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:		
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:		
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:		
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:		
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:		
COMMENTS:	DUAL TEM	P-HW ALSO			***		
				<u> </u>			
		-					
		·····					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

BLDG:

7086

FILE:

	BOILE	R & CON	VERTER - HVA	C UPGRAL	E OBSEK	VATIONS	
BOILER/CONVERTER NO),	BLR-1	LOCATION (RM)	MER			
BOILER TYPE:		HW		NHAM	MODEL:	EW-30-G-	PF
CONVERTER TYPE:			MFG.:		MODEL:		
STM - Steam		- Steam to Hot			TM - High Ten	•	
HW - Hot Water			. HW to HW Cv.		Domestic Hot W		
BOILER BURNER	ATMOSPI		POWER: X	Jok:	X	REPLACE	
COMMENTS:	BOILER L	OOKS NEW					-
4.0.7							
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:	SEE REF	RIGERATION	FORM FOR DUAL T	EMP PUMP			
BLR INSULATION	N/A:	OK: X	MISSING:		TED QUANTI		20' @ 3-1/2"
					TED OLIVINTI	T\/.	20' ക 3-1/2"
PIPE INSULATION	N/A:	OK:	MISSING: X	ESTIMA	TED QUANTI	I Y :	20 @ 0 1/12
		OK:	MISSING: X	JESTIMA	TED QUANTI	11.	20 @ 0 112
PIPE INSULATION COMMENTS:	N/A:				TED QUANT	IT.	20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A:	ОК: X ОК: X	REPLACE:	SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A: X	OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		20 @ 0 112
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	TED QUANTI		
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	ATED QUANTI		
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:		TY:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0602 BLDG NAME: DENTAL CLINIC

GAS METER: N

SUSPECT ACM: N

CONDITIONED SQFT:

11,557

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 9

SUN: MON: TUE: WED: THUR: FRI: SAT: 0 0 0 0 0 PRES START: 0 0 24 24 24 24 24 24 PRES STOP: 0 9 9 9 9 REQ START: 0 9 0 17 17 17 17 17 REQ STOP:

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

DATE: 10/17/94 PREPARED BY: AJN/CWW

AIR HANL	LING UNIT SURVEY OBSERVATIONS
BUILDING NUMBER: 060	
AHU NUMBER: AH	U-1 AHU LOCATION: MER
REFRIG SYS # SRVNG AHU: C	H-1 SERVES AREA: ALL
	% OF BLDG AREA HEATED: 80
AHU UNIT TYPE DUAL DUCT	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	13,900 CFM-CLG : 13,900
MIN %OA:	10 MAX %OA: 100
NAMEPLATE	
UNIT MFG: TRAN	UNIT MODEL: H-25-B
SUPPLY FAN HP:	25 RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: GOUL SUPPLY FAN MTR MODEL:	VICTOR AND ADDRESS OF THE PROPERTY OF THE PROP
COMMENTS:	RET/EXH FAN MTR MODEL:
COILS	
Coil	Coil Type Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: HOT	WATER 🗵
REHEAT COIL: NONE	-
HUMIDIFIER: STEA	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 9	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON:	TUE: WED: THUR: FRI: SAT:
PRES START: 0 0	0 0 0 0
PRES STOP: 24 24	
REQ START: 0 9	
REQ STOP: 0 17	<u>17 17 17 0</u>
MONTHS JAN: FEB: MAR: ON:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF CONTROLS:	
PRESENT TEMP WINTR OCC:	0 HOT DECK DEG F: 0 COLD DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	O COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: Y	MIXED AIR DMPR CONTROL: Y IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL:	ECONOMIZER DB CONTROL: N TIME CLOCK: Y
RET AIR DMPR CONTROL:	ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	Time Clock: 5am-8pm M-W; 5am-9pm Th-F; off Sat & Sun

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N	JMBER: (0602			E	BOILER F	RM LOCA	TION:	MER		
OILER UI	NIT										
			BLR/CON\	VERTER SER	VES ARE	A OR SE	RVICE:	ALL			
SOURCE OF	BLUG HEA	\ I									
● ⊠ BOIL	_					NVERTE	-				
	_	BLR-1		" TO 105"	:	VERTER	=				= .
	-		STEAM (15#	# 10 125#)		ERTER T ' HT SOU	-				
FUE	L TYPE:	NAT. GAS			CONV	111 300					
CENTRA	L PLANT D	IRECT									
AMEPLA	TE			% /	AREA HE	ATED BY	BB RAD	IATION:	-		20
BOILER MFG:	ĪBR				BLR CA	AP OUTP	UT (BTU	H):		506,000	-
UNIT MODEL:	PF506				BLR	CAP INP	UT (BTUI	H):		607,200	-
COMMENTS:								· · · · · · · · · · · · · · · · · · ·			-
CHEDULI	E										_
DAYS SCHEDU	=	9					MONTH	SECHD	ULE NO:		1
CHEDULE COM	MENTS:										
	SUN:	MON:	TUE:	WED: TI	HUR:	FRI:	SAT:				_
PRES START		0	0	0	0	0 _	0				
PRES STOP		= 24	24	24	24 =	24	24				
REQ START:		9 17	17	9 17	== <u>9</u> 17	9 17	0				:
REQ 310F			17								_:
MONTHS JAN	: FEB:	MAR:	APR: N	MAY: JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-:
ON: ☑	\boxtimes	\boxtimes	\boxtimes					\boxtimes	\boxtimes	\boxtimes	
ONTROL	S										
TYPE O	F BLR CON	NTROLS:	ELECTRI	IC			RESE	T CONTE	ROLS: [N	
OPE	RATING SE	TPOINT:		DEG F	or PSIG						
TYPE OF BU	RNER COM	NTROLS:									
CONT	ROLS COM	IMENTS:									_

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N	UMBER: (0602				BOILER	RM LOCA	ATION:	MER		
BOILER U	NIT										
0011005.05	51.50.115		BLR/CON	VERTER S	ERVES ARI	EA OR SI	ERVICE:	ALL			
SOURCE OF	BLDG HEA	47									
● □ BOIL	ER.				⊠ <u>C</u>	ONVERT	ER				
•	ER TAG:				CON	IVERTER	RTAG: [CV-1			_
	R TYPE:				CON	/ERTER	TYPE:	H OT MTS	W]
FUE	L TYPE:				CON	V HT SO	URCE:				
CENTRA	L PLANT D	IRECT									
NAMEPLA	TE				% AREA HE	ATED B	Y BB RAI	DIATION	•		20
BOILER MFG:	BELL AND	GOSSET	T		BLR C	AP OUTF	UT (BTU	H):		500,000	
UNIT MODEL:	SU-64-4				BLR	CAP INF	UT (BTU	H):			
COMMENTS:	Year Built:	1979									
	:										
SCHEDUL	<u>E</u>										
DAYS SCHEDU	JLE NO:	9					MONTH	H SECHE	DULE NO:		1
SCHEDULE COM	MENTS:										
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				:
PRES START		0	0	0	0		0				
PRES STOP		24	24	24	24	24	24				
REQ START:		9 17	9	9	9 =	9	0				
REQ 310F	,		17	17	17	17	0				
MONTHS JAN	: FEB:	MAR:	APR: N	MAY: JU	N: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-
ON:	\boxtimes	\boxtimes						\boxtimes	\boxtimes	\boxtimes	
CONTROL	S										
TYPE O	F BLR CON	NTROLS:			j		RESE	T CONTI	ROLS:	N	
OPER	RATING SE	TPOINT:		DEC	F or PSIG						
TYPE OF BU	RNER CON	ITROLS:									
CONT	ROLS COM	MENTS:					-				
HW PUMP											
PUMP TAG:	: 1	1	PUMP	HP:	0.2	5 _. I	PUMP MF	G: BEI	LL AND G	OSSETT	
PUMP SERVICE	: HW PUN	1P				PUI	MP MODE	EL:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94
PREPARED BY: AJN/CWW

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUM	MBER:	0602			E	BLDG NA	AME: [DENTAL	CLINIC				
PER RAD			: RAD	-1		-:	RAD SY	'S LOCA	TION:				
	•	HEATING	parent and a will			1	s	ERVES A	AREA: [PERIMET	ER ROO	MS	
RAD	IATION I	JNIT TYPE	: HW					% AREA	HTG:		20	Ō	
,									_				
RADIA	<u> TION</u>	PUM	-										
PUMP T	AG: 1			PUM	P HP:	0.2	5	PUMP	MFG:				
							F	PUMP M	ODEL:				
COLLED													
SCHED	ULE												
DA	YS SCHI	EDULE NO):	9		MON	THS SC	HEDULE	NO:		1		
SCHE	DULE C	OMMENTS	S:										
		SUN:	MON:	TUE:	WE	D: TH	JR:	FRI:	SAT:				
PRES S	TART:	0	0	0		0	0	0	0				
PRES	STOP:	24	24	24	2	24	24	24	24				
REQ S		0	9	. 9		9	9	9	0				
REQ	STOP:	0	17	17	1	17	17	17	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	\boxtimes	\boxtimes	\boxtimes	\boxtimes						\boxtimes	\boxtimes	\boxtimes	***
CONTR	ROLS												
TY	PE OF F	AD. CON	TROLS:	ELECT	RIC								
	DADIA	TION CO	NTROI ·										
		C HT SPA			0				ECET C	ONTEO!	. [N]		
	UNOC	C HT SPA	CE SP:		0				RESET CO	JNIKUL	: N		
	CONTR	ROL COM	MENTS:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: AJN/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0602 BLDG NA	AME: DENTAL CLINIC			
REF. UNIT NUMBER/TAG: CH-1	LOCATION (MER#): AHU'S SERVED:	EXTERIOR BLDG.		
UNIT TYPE AIR COOLED CONDENS	SING UNIT W/ CHW			
NAMEPLATE				
CHILLER MFG: TSI	TOWER MFG:			
CHILLER MODEL: CA2CD75	# OF TOWER FANS:	6 208 4.5		
CHILLER SERIAL NO: 4-87-12225	TOWER FAN V:			
CHILLER V: 460	TOWER FAN AMPS:			
CHILLER AMPS: 67.5	TOWER FAN HP:	1		
CHILLER PH: 3				
CHILLER CAP (TONS): 78.2				
COMMENTS:				
SCHEDULE				
DAYS SCHEDULE NO: 9	MONTHS SCHEDULE NO:	2		
SCHEDULE COMMENTS:				
SUN: MON: TUE: WED: 1	THUR: FRI: SAT:			
PRES START: 0 0 0 0	0 0 0			
PRES STOP: 24 24 24 24	24 24 24			
REQ START: 0 9 9	9 9 0			
REQ STOP: 0 17 17 17	17 17 0			
MONTHS JAN: FEB: MAR: APR: MAY: JUN	I: JUL: AUG: SEP: OCT	T: NOV: DEC:		
ON:				
CONTROLS				
TYPE OF CONTROLS: ELECTRIC				
0140 07700				
CWS SETDOMT, 50	CAUAGO OFTDOIAIT			
CWS SETPOINT: 52	CNWS SETPOINT:	0		
CWR SETPOINT: 0	CNWS SETPOINT:	0		
CWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE	CNWR SETPOINT: HI: N OTHER INDICATION	0		
CWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE PRESS LITE LOW: N TEMP LITE LO	CNWR SETPOINT: E HI: N OTHER INDICATION OW: N	0		
CWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE	CNWR SETPOINT: E HI: N OTHER INDICATION OW: N	0,		
CWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE PRESS LITE LOW: N TEMP LITE LO	CNWR SETPOINT: E HI: N OTHER INDICATION OW: N	0		
CWR SETPOINT: PRESS LITE HI: PRESS LITE LOW: PRESS GAUGES: CONTROLS COMMENTS:	CNWR SETPOINT: E HI: N OTHER INDICATION OW: N	0		
CWR SETPOINT: PRESS LITE HI: PRESS LITE LOW: PRESS GAUGES: N TEMP LITE LOW PRESS GAUGES: N TEMP GAUGE	CNWR SETPOINT: E HI: N OTHER INDICATION OW: N	ODRS:		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

			BLDG:	602		FILE:	602.XLS	
	AIR I	HANDLING	UNIT - HVA	C UPGRADE (DBSERVA	TIONS		
AHU NO.:	AHU-1	LOCATION	(Rm) MI	ĒR				
AHU TYPE: DUAL DUCT		MFG.:	TRANE CLIMAT	E CHANGER	TYPE: H-25	В	**	
SZ - Single Zone	H&V - Hea	ating & Vntltng.	FC	- Fan Coil (Indicate 2	P for 2 Pipe or	4P for 4 Pipe	;)	
MZ - Mulitzone	.VAV - Var	iable Air Vol.	RI	HT - Reheat System				
DD - Dual Duct	.UH - Unit	Heater	IN	D - Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER (2)	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Dampe	er Actuator
-			M400-1				RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE:		COMMEN	TS:			
INLET VANES	N/A: X	OK:	COMMENTS:			·		
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	TS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE:		COMMEN	TS:			
COMMENTS:								
	·	···			•			
							A44.11.04.11.1	
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
PREHEAT COIL	N/A:	ОК:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A:	ок:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	THERMA	L RECLAIM CO)IL				RP-ACT = Replace	Actuator
		 					RP-BD = Replace i	Body
AHU PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	1/3 HP ON	HOT WATER	₹	
AHU PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATI	ED QUANTITY:			
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMATI	ED QUANTITY:			
COMMENTS:					·	·		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

			BLDG:	602	FILE: 602.XLS	
	REFRIGI	RATION E	QUIPMENT	HVAC UPGRA	DE OBSERVATIONS	
HILLER / EQUIP. NO.		CH-1	LOCATION (RM		LDG. SOUTH SIDE	
REFG. EQUIP. TYPE:		R-ACCU	MFG.: TS		MODEL: CA2CD75	
C-WCT = Centrifugal w/ V	Vater Side C	ooling Tower	:R-/	ACCU = Reciprocating	w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating v	v/ Water Side	e Cooling Towe	AS	B-WCT = Absorption w	// Water Side Cooling Tower	
CCU = Air Cooled Cond	ensing Unit		CT	= Cooling Tower		
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:		
CT/ACCU FAN MTR	N/A;	OK:	REPLACE:	SIZE:		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:	TYPICAL	OF 8 FANS				
COOLING TOWER	N/A:	IOK:	REPLACE:	ISIZE:		
AIR COOLED COND.	<u> </u>		REPLACE:			
	N/A:	OK: X	REPLACE:	SIZE:		
COMMENTS:						
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATE	D QUANTITY:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATE	D QUANTITY:	
COMMENTS:	EXT. PIP	E NEEDS NEW	PROTECTIVE JA	CKET OVER PIPE INS	SULATION ~50' @8" DIA.	,
	***					•
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:		
CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A:	OK: X	REPLACE:	SIZE: - SIZE:		
		1				
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	- SIZE:		
CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A:	OK: X	REPLACE:	- SIZE:		
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	- SIZE: SIZE: SIZE:		
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A:	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE:	- SIZE: SIZE: SIZE: SIZE:		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

602

FILE:

	BOILE	R & CON	VERTER -	HVAC UP	GRADI	E OBSERV	ATIONS	
BOILER/CONVERTER NO).	BLR-1	LOCATION	(RM)	MER			
BOILER TYPE:	-	STM	MFG.:	BURNHAM		MODEL:	PF-506	·
CONVERTER TYPE:			MFG.:			MODEL:		
STM - Steam		Steam to Hot				ГМ - High Temp		Convertor
HW - Hot Water		V - High Temp	. HW to HW C			omestic Hot Wa		
BOILER BURNER	ATMOSPI		POWER:	Х	OK:	Х	REPLACE:	
COMMENTS:	BOILER IS	S LEAKING AT	BOTTOM, SI	DES ARE RU	STED OUT			
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:								
BLR INSULATION	N/A:	OK: X	MISSING:			FED QUANTITY		
PIPE INSULATION	N/A:	OK:	MISSING:	Х	ESTIMAT	TED QUANTITY	(:	15' @ 4"
COMMENTS:								
				*	14.767			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:	1044177		
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
COMMENTS:	****							
					Toine			
CV PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:			
CV PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:			
COMMENTS:								
OV/MODILATION	MK t/A	IOV: V	IMICCINO		IECTIMA*	TED QUANTIT	V:	
CV INSULATION	N/A:	OK: X	MISSING:			TED QUANTIT		
CV PIPE INSUL.	N/A:	OK: X	MISSING:		IESTIMA	LED COANTIL	T .	
COMMENTS:								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7665

BLDG NAME: DENTAL CLINIC

ELECTRIC METER: N

CONDITIONED SQFT:

11,076

GAS METER: N SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 1

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	6	6	6	6	6	0
REQ STOP:	0	16	16	16	16	16	0

REMARKS:

Building was remodeled in 1990. Building contact: Michelle Brethour @ Ext: 4332

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

CONTROLS COMMENTS:

EMC NO: 1406-001 **DATE:** 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

		11 2 1 17	***************************************		<u> </u>				<u> </u>	,, , , , ,	0110		
	BUILDING I												
	AHU I	NUMBER	: AHL	J-1			AHU L	OCATIO	N: BASE	EMENT	MER		
REFRI	G SYS # SI	RVNG AF	IU: CI	1 -1			SERVE	S AREA:	ALL				
					% C	F BLDG	AREA H	IEATED:				100	
AHU	UNIT TYPE	MULTI	ZONE					N	UMBER (OF ZON	S IF MZ	UNIT:	6
	CF	M-HTG:		19	,500		CI	M-CLG:		1	9,500		
	MII	N %OA:			10		MA	X %OA:			100		
NAME	PLATE								o.				
		T MFG:	U.S. A	IR CO				UN	IIT MODE	L: BM	Z-224		
	SUPPLY F				15				(H FAN H			0	
	LY FAN MT								MTR MF				
SUPPLY	FAN MTR N COMI	MENTS:	-				KE I/EXF	I FAN M	TR MODE	:L:			
COILS													
	Coil			Coil Type	•		Mo	dulating	Valve?				
	PREHEA	T COIL:	NONE										
	HEATING	G COIL:	STEA	И			🗵						
		T COIL:	NONE				📙						
		DIFIER:	STEAM	М									
	COOLIN	3 COIL:	DX										
SCHEE	DULE												
DAY	SCHEDUL	E NO: 🥛	1						MONT	'H SCHE	DULE N	O:	3
SCHEDU	LE COMME	ENTS:											
		SUN:	MON:	TUE:	WE	D: TH	UR:	FRI:	SAT:				
PRES S	START:	0	0	0		0	0	0	0				
	STOP:	24	24	24		24	24	24	24				•
	START:	0	6	6		6	6	6	0				1
REQ	STOP:	0	16	16		16	16	16	0				
MONTHS ON:	JAN:	FEB: I	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
		\boxtimes		\boxtimes				\boxtimes	\boxtimes	\boxtimes			
CONT	ROLS												
	TYPE C	F CONT	ROLS:	PNEUM	ATIC				MOSTAT		SINGLE	SETPOI	
PRE	SENT TEM	P WINTE	OCC:			72			DECK D				0
PRESE	NT TEMP V	VINTR UI	NOCC:			72			ED AIR D				0
Pi	RESENT TE	MP SUN	OCC:			72	OTHE		DINT DES				Ť
PRES	SENT TEMP	SUM UI	NOCC:			72	OT	HER SET	POINT D	EG F:			0
MIN O	A DMPR C	ONTROL	: N	MIX	ED AIF	R DMPR	CONTRO	L: Y	IMPLE	MENT D	EMAND	LIMIT CN	ITRLS?
MAX O	A DMPR C	ONTROL	: 🔯	ECC	NOMI	ZER DB	CONTRO	L: N				TIME (LOCK:
RET A	R DMPR C	ONTROL	: 🕎	ECO	NOMIZ	ER WB	CONTRO	L: N		TIME	CLOCK (OPERATI	ONAL?
EXH A	R DMPR C	ONTROL	: N										
ОТ	HER CONT	ROLS D	ESCR:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE**: 10/12/94

PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

SOURCE OF BLDG HEAT	BUILDING NUMBER:	7665		BOILER RM LOCA	ATION:	BASEME	NT AREA
SOURCE OF BLDG HEAT	OILER UNIT						
BOILER TAG: BLR-1	SOURCE OF BUDG H		VERTER SERVES AR	EA OR SERVICE:	ALL		
BOILER TAG: BLR-1	- SOURCE OF BLUG H	EAI					
BOILER TYPE: LOW PRESS STEAM (<15#) FUEL TYPE: NAT. GAS CONV HT SOURCE: CENTRAL PLANT DIRECT MATERIAL STATE CONVERTER TYPE: CONV HT SOURCE: CENTRAL PLANT DIRECT MATERIAL STATE CONVERTER TYPE: CONV HT SOURCE: CONVERTER TYPE: CONV HT SOURCE: CONVERTER TYPE: CONVE				_			
FUEL TYPE: NAT. GAS				F			
CENTRAL PLANT DIRECT **AMEPLATE** **AREA HEATED BY BB RADIATION: COLUMN COLUM			/	÷			
## AMEPLATE **OILER MFG: KEWANEE BLR CAP OUTPUT (BTUH): 648,000	FUEL TYPE:	NAT. GAS	CON	V HI SOURCE:			
SOURCE BLR CAP OUTPUT (BTUH): 648,000	CENTRAL PLANT	DIRECT					
JNIT MODEL: 3R51G	AMEPLATE		% AREA H	EATED BY BB RAI	DIATION:		
START:	BOILER MFG: KEWAN	EE	BLR C	AP OUTPUT (BTU	H):		648,000
CHEDULE DAYS SCHEDULE NO: 1 MONTH SECHDULE NO: 1 CHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 REQ START: 0 <t< td=""><td></td><td></td><td>BLF</td><td>CAP INPUT (BTU</td><td>H):</td><td></td><td>810,000</td></t<>			BLF	CAP INPUT (BTU	H):		810,000
CHEDULE DAYS SCHEDULE NO: 1 MONTH SECHDULE NO: 1 CHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 REQ START: 0 <t< td=""><td>COMMENTS:</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	COMMENTS:						
DAYS SCHEDULE NO: 1 MONTH SECHDULE NO: 1 CHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 REQ START: 0 6 6 6 6 6 0 REQ STOP: 0 16 16 16 16 16 0 ONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ONTROLS Image:	COMMENTS.						
SUN: MON: TUE: WED: THUR: FRI: SAT:	CHEDULE						
SUN: MON: TUE: WED: THUR: FRI: SAT:	DAVS SCHEDIILE NO:	1		MONTI	H SECHE	ULE NO:	
PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24	CHEDULE COMMENTS:						
PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24	SUI	N: MON: TUE:	WED: THUR:	FRI: SAT:			
REQ START: 0 6 6 6 6 6 0 REQ STOP: 0 16 16 16 16 0 ONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: ON: ON: TYPE OF BLR CONTROLS: OPERATING SETPOINT: DEG F or PSIG RESET CONTROLS: N OPERATING SETPOINT: DEG F or PSIG			0 0	0 0			
REQ STOP: 0 16 16 16 16 16 0 ONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: □ ON: □ □	PRES STOP: 2	24 24 24	24 24	24 24			
ONTROLS TYPE OF BLR CONTROLS: PNEUMATIC DEG F or PSIG ONTROLS ONTROLS: PNEUMATIC DEG F or PSIG	REQ START:	0 6 6	6 6	6 0			
ON: ONTROLS TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: N OPERATING SETPOINT: DEG F or PSIG	REQ STOP:	0 16 16	16 16	16 0			
ON:	ONTHS JAN: FEB	: MAR: APR:	MAY: JUN: JUL:	AUG: SEP:	OCT:	NOV:	DEC:
ONTROLS TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: N OPERATING SETPOINT: DEG F or PSIG	ON:				M	M	[X]
TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: N OPERATING SETPOINT: DEG F or PSIG							
OPERATING SETPOINT: DEG F or PSIG	ONTROLS						
	TYPE OF BLR C	ONTROLS: PNEUM/	ATIC	RESE	T CONTI	ROLS: [N
TYPE OF BURNER CONTROLS:	OPERATING	SETPOINT:	DEG F or PSIG	ì			
	TYPE OF BURNER C	ONTROLS:					
CONTROLS COMMENTS:	CONTROLS C	OMMENTS:					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94
PREPARED BY: AJN/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

REF. UNIT NUMBERITAG: CH-1	BLDG NUMBER: 7	665	BLDG NAMI	E: DENTAL CLINIC	OBOLIVA	110110
NAMEPLATE	REF. UNIT NUMBER/1	ΓAG: CH-1		LOCATION ((MER#): BASEMENT	MER
CHILLER MFG: COPELAMETIC		. <u> </u>			ERVED: AHU-1	
CHILLER MFG:	L	INIT TYPE REC	IPROCATING WITH CO	DOLING TOWER		
CHILLER MODEL: CHILLER SERIAL NO: CTC32E01746 CHILLER SERIAL NO: CTC32E01746 TOWER FAN V: 0 CHILLER AMPS: 88.5 CHILLER AMPS: CHILLER PH: CHILLER CAP (TONS): COMMENTS: COMMENTS: CHEDULE DAYS SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON: PRES START: DAYS SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON: PRES START: DAYS SCHEDULE NO: SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON: MON: PRES START: DAYS SCHEDULE NO: S	NAMEPLATE					
CHILLER SERIAL NO: CTC82B01746 TOWER FAN V: 0 CHILLER V: 208 TOWER FAN AMPS: 0 CHILLER AMPS: 88.5 CHILLER AMPS: 65 CHILLER CAP (TONS): 50 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 1 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS: PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 REQ START: 0 6 6 6 6 6 6 0 REQ STOP: 0 16 16 16 16 16 16 0 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: ON: DEC: ON:	CHILLER MF	G: COPELAME	ГІС	TOWER MFG:	MARLEY AQUATOV	WER
CHILLER V: 208 TOWER FAN AMPS: 0 CHILLER AMPS: 88.5 CHILLER PH: 3 CHILLER CAP (TONS): 50 COMMENTS: COMMENTS: DAYS SCHEDULE NO: 1 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	CHILLER MODE	L: 4RH1-2500-7	SK	# OF TOWER FANS:		1
CHILLER AMPS:	CHILLER SERIAL N	O: CTC82B0174	16	TOWER FAN V:		0
CHILLER PH: 3 CHILLER CAP (TONS): 50 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 1 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS: PRES START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHILLER	V:	208	TOWER FAN AMPS:		0
CHILLER CAP (TONS): 50 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 1 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS: PRES START: 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	CHILLER AMP	'S:	88.5	TOWER FAN HP:		5
DAYS SCHEDULE NO:	CHILLER P	H:	3			
DAYS SCHEDULE NO:	CHILLER CAP (TONS	3):	50			
DAYS SCHEDULE NO: 1	COMMENT	'S:				
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	SCHEDULE					
SUN: MON: TUE: WED: THUR: FRI: SAT:	DAYS SCHEDU	JLE NO:	1	MONTHS SCHED	JLE NO: 2	
PRES START: 0 0 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	SCHEDULE COM	MENTS:			Ven terrentia del constitución de la constitución d	
PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24				UR: FRI: SAT:		1
REQ START:						
REQ STOP: 0 16 16 16 16 16 0 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: ON: ON: ON: ON: ON: ON: ON: ON: ON						
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: ON: ON: ON: ON: ON: ON: ON: ON: ON						
ON: CONTROLS TYPE OF CONTROLS: PNEUMATIC/ELECTRIC CWS SETPOINT: CWR SETPOINT: OCNWR SETPOINT: OCNWR SETPOINT: PRESS LITE HI: PRESS LITE HI: PRESS LITE LOW: PRESS GAUGES: N CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	REQ STOP:	0 16	16 16	16 16 0		
CONTROLS TYPE OF CONTROLS: PNEUMATIC/ELECTRIC CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	MONTHS JAN: F	EB: MAR: A	PR: MAY: JUN:	JUL: AUG: SEF	C: OCT: NOV:	DEC:
TYPE OF CONTROLS: PNEUMATIC/ELECTRIC CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON			1 6 6			
TYPE OF CONTROLS: PNEUMATIC/ELECTRIC CWS SETPOINT: 0 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP GAUGES: N CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	<u> </u>					<u> </u>
CWS SETPOINT: CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: PRESS LITE LOW: PRESS GAUGES: N TEMP GAUGES: CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	CONTROLS					
CWS SETPOINT: CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: PRESS LITE LOW: PRESS GAUGES: N TEMP GAUGES: CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	TYPE OF CO	NTPOLS: DNE	IMATIC/ELECTRIC	·		
CWR SETPOINT: O CNWR SETPOINT: O PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON				ال		
PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON				CNWS SETPOIN	Γ:	0
PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: N TEMP GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	CWR S	ETPOINT:	0	CNWR SETPOINT	Γ:	0
PRESS GAUGES: N TEMP GAUGES: N CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	PRES	S LITE HI: N	TEMP LITE H	I: N OTHER IN	IDICATIORS:	
CONTROLS COMMENTS: CW and CNW PUMPS PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	PRESS L	ITE LOW: N	TEMP LITE LOW	/: N		7
PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	PRESS	GAUGES: N	TEMP GAUGES	3: N		-
PUMP TAG: 1 PUMP HP: 5 PUMP MFG: MARATHON	CONTROLS	COMMENTS:				
	CW and CNW	PUMPS				
		,	IMP HP:	5 PLIMP MEG	· MARATHON	
UNIC SERVICE. ICONU WATER PUMP (CNW) DIMO MODEL IZ/0140/ EL 7007/40/4/				PUMP MODEL		~\^/

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

7665

FILE:

LILINO .	AHU-1	LOCATIO	GUNIT - HVAC UNIT - MER					
AHU NO.: AHU TYPE:	MZ	MFG.:	U.S. AIR CO.		MODEL:	MZ-224		
SZ - Single Zone		ating & Vntltng		n Coil (Indicate :			1	
MZ - Mulitzone		iable Air Vol.		Reheat System	21 101 21 1pc 01	41 101 41 1pc	1	
DD - Dual Duct	UH - Unit I			duction System				
O.A. DAMPER	N/A:	OK:	REPLACE:	ISIZE:	DPR-ACT	OK:	IRP- ACT:	
R.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	-
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:			C. COULD NOT FIND O			JL	DPR-ACT = Damp	er Actuator
COMMENTS.			LSEWHERE IN BLDG. C				RP-ACT = Replace	
	WIOOT DL	LOOKILDE	LOCATION IN DEBO. C	71 011 11001 .			10 1101 1101100	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:	,			
COMMENTS:	1177.	JOIN. 7	1.45, 5.101.					
COMINENTS.					M			
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY AIR FAN	OK: X	REPLACE		COMMEN				
INLET VANES	N/A: X	OK:	COMMENTS:	COMMEN				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITC:	N/A		
RETURN AIR FAIN	IIUK:	KEPLACE	FAN BEARINGS.	COMMEN	110.	IN/A		
		IDEDL (OF		LCOMMEN	ITC.	NI/A		
RETURN FAN MOTOR	OK:	REPLACE	:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR		REPLACE		COMMEN	ITS:	N/A		
RETURN FAN MOTOR		REPLACE	:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR COMMENTS:	OK:						IDD ACT.	Inn an
RETURN FAN MOTOR COMMENTS: COOLING COIL	OK:	OK: X	REPLACE:	SIZE:	CNTLVLV	(NONE)	RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	(NONE) OK: X	RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A:	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	(NONE) OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A:	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A:	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A:	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: X	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	I(NONE) OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: X	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	(NONE) OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

			BLDG:	7665	FILE: 7665.XLS
	REFRIGE	RATION I	EQUIPMENT -	HVAC UPGR	ADE OBSERVATIONS
CHILLER / EQUIP. NO.		CH-1	LOCATION (RM)	MER	
REFG. EQUIP. TYPE:		R-WCT	MFG.:		MODEL:
C-WCT = Centrifugal w/	Water Side Co	ooling Tower	R-A	CCU = Reciprocatin	ng w/ Air Cooled Condensing Unit
R-WCT = Reciprocating		Cooling Towe	r ASE	3-WCT = Absorption	n w/ Water Side Cooling Tower
ACCU = Air Cooled Cond	densing Unit		CT =	= Cooling Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X		REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:					
COOLING TOWER	N/A:	TOK: V	IDEDI ACE	Touze	EAIDLY DUOTED AND DIDTY DUT ON
		OK: X	REPLACE:	SIZE:	FAIRLY RUSTED AND DIRTY BUT OK
AIR COOLED COND.	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:	CNDW PL	JMP OK, SEAL	S OK. FAN MOTOR	R BODY RUSTED (ON TOWER.
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:
CHW PIPE INSUL.	N/A: X	OK:	MISSING:	IESTIMAT	ED QUANTITY:
COMMENTS:	DX UNIT				
CHW PUMP MOTOR	N/A: X	ОК:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	MAN-
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHAN FOME MOTOR	III 4// 15. 77				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7665

FILE:

	BOILE		VERTER - HVAC		F ORSEK/	AHUNS	
BOILER/CONVERTER NO.		BLR-1	LOCATION (RM)	MER			
BOILER TYPE:		STM	MFG.: KEWANI	EE	MODEL:	3R51G	
CONVERTER TYPE:			MFG.:	11.171.114//0	MODEL:	. 184/4 . 04	
STM - Steam			t Water Conv.		TM - High Tem		
HW - Hot Water			o. HW to HW Cv.		omestic Hot Wa	REPLACE	
BOILER BURNER	ATMOSPI		POWER: 1/4 HP	OK:	Х	REPLACE	
COMMENTS:	NEW CON	NDENSATE F	PUMP				
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:							
		-					
BLR INSULATION	N/A:	ОК: Х	MISSING:		TED QUANTIT		
PIPE INSULATION	N/A:	OK:	MISSING:	ESTIMA	TED QUANTITY	/ :	ASBESTOS
COMMENTS:							
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		· · · · · · · · · · · · · · · · · · ·	
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:			TER, 80 GALLON - RHEE	M, MODEL 8	1G-80D		
		TTS UPPER					
		TTS LOWER		- To:			
CV PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CV PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:							
CV INSULATION	N/A:	OK:	MISSING:		TED QUANTIT		
CV PIPE INSUL.	N/A:	OK:	MISSING:	ESTIMA	TED QUANTIT	Y:	
COMMENTS:							

8

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 11/8/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJNCWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7670

BLDG NAME: DENTAL CLINIC

ELECTRIC METER: N

CONDITIONED SQFT:

14,960

GAS METER: N SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

SUN: MON: TUE: WED: THUR: FRI: SAT: 0 0 0 0 0 0 PRES START: 0 24 24 24 24 24 24 PRES STOP: 24 ____6 0 6 6 6 6 **REQ START:** 0 16 16 16 16 0 16 REQ STOP:

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 11/8/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJNCWW

BUILDING NUMBER AHU NUMBER		AHU LOCATION: MER	
REFRIG SYS # SRVNG AF		SERVES AREA: ALL F BLDG AREA HEATED:	100
AHU UNIT TYPE DOUB	LE DUCT	NUMBER OF ZO	ONES IF MZ UNIT: 0
CFM-HTG:	25,405	CFM-CLG:	25,405
MIN %OA:	10	MAX %OA:	100
NAMEPLATE			
UNIT MFG:	JOHN ZINK CO	UNIT MODEL:	76-155-1
SUPPLY FAN HP:	7.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL:			
HUMIDIFIER:			
COOLING COIL:	DX	\boxtimes	
SCHEDULE			
DAY SCHEDULE NO: SCHEDULE COMMENTS:	1	MONTH SC	HEDULE NO: 3
DAY SCHEDULE NO:			CHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS:	MON: TUE: WED		HEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN:	MON: TUE: WED	D: THUR: FRI: SAT:	HEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0	MON: TUE: WED 0 0 24 24 2	D: THUR: FRI: SAT: 0 0 0 0	CHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE: WED 0 0 24 24 2 6 6	D: THUR: FRI: SAT: 0 0 0 0 0 24 24 24 24	CHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON: TUE: WED 0 0 24 24 2 6 6	D: THUR: FRI: SAT: 0 0 0 0 0 44 24 24 24 6 6 6 0	:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON: TUE: WED 0 0 24 24 2 6 6 16 16 1	D: THUR: FRI: SAT: 0 0 0 0 144 24 24 24 6 6 6 0 6 16 16 0	T: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: 1	MON: TUE: WED 0 0 24 24 2 6 6 16 16 1 MAR: APR: MAY:	D: THUR: FRI: SAT: 0 0 0 0 24 24 24 24 6 6 6 6 0 6 16 16 0 JUN: JUL: AUG: SEP: OC	T: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PREQ START: REQ STOP: O MONTHS JAN: FEB: ON:	MON: TUE: WED 0 0 0 24 24 2 6 6 16 1 MAR: APR: MAY: □ □ □ □	D: THUR: FRI: SAT: 0 0 0 0 0 24 24 24 24 6 6 6 6 0 6 16 16 16 0 JUN: JUL: AUG: SEP: OC X X X X THERMOSTAT TYPE	T: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PREQ STOP: REQ STOP: ON: MONTHS JAN: FEB: ON:	MON: TUE: WED 0 0 24 24 22 6 6 6 16 16 1 MAR: APR: MAY: ☑ ☑ ☑	D: THUR: FRI: SAT: 0 0 0 0 0 24 24 24 24 6 6 6 6 0 5 16 16 16 0 JUN: JUL: AUG: SEP: OC X X X X THERMOSTAT TYPE HOT DECK DEG F	T: NOV: DEC: DUAL SETPOINT: 0
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ START: OREQ STOP: ON: MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT	MON: TUE: WED 0 0 24 24 2 6 6 16 16 1 MAR: APR: MAY: □ □ □ □ □ ■ □ □ □ □ ■ □ □ □ □ □ ■ □ □ □ □	D: THUR: FRI: SAT: 0 0 0 0 0 44 24 24 24 6 6 6 6 0 5 16 16 16 0 JUN: JUL: AUG: SEP: OC X X X X THERMOSTAT TYPE HOT DECK DEG F COLD DECK DEG F	T: NOV: DEC: DUAL SETPOINT DUAL SETPOINT DUAL SETPOINT DUAL SETPOINT
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PREQ START: OREQ STOP: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE UP	MON: TUE: WED 0 0 24 24 24 6 6 16 16 1 MAR: APR: MAY:	D: THUR: FRI: SAT: 0 0 0 0 0 44 24 24 24 6 6 6 6 0 6 16 16 16 0 JUN: JUL: AUG: SEP: OC X X X X THERMOSTAT TYPE HOT DECK DEG F COLD DECK DEG F MIXED AIR DEG F	T: NOV: DEC: DUAL SETPOINT DUAL SETPOINT DUAL SETPOINT DUAL SETPOINT DUAL SETPOINT
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PREQ START: OREQ STOP: ON: CONTROLS TYPE OF CONT	MON: TUE: WEE 0 0 0 24 24 24 6 6 6 16 16 1 MAR: APR: MAY:	D: THUR: FRI: SAT: 0 0 0 0 0 44 24 24 24 6 6 6 6 0 5 16 16 16 0 JUN: JUL: AUG: SEP: OC X X X X THERMOSTAT TYPE HOT DECK DEG F COLD DECK DEG F	T: NOV: DEC: DUAL SETPOINT DUAL SETPOINT DUAL SETPOINT DUAL SETPOINT DUAL SETPOINT
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ START: OREQ STOP: OREQ STOP: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE UN PRESENT TEMP SUN	MON: TUE: WEE 0 0 24 24 24 6 6 16 16 1 MAR: APR: MAY:	D: THUR: FRI: SAT: 0 0 0 0 0 44 24 24 24 6 6 6 6 0 6 16 16 16 0 JUN: JUL: AUG: SEP: OC X X X X THERMOSTAT TYPE HOT DECK DEG F COLD DECK DEG F MIXED AIR DEG F O THER SETPOINT DESCRIP O OTHER SETPOINT DEG F	T: NOV: DEC: DUAL SETPOINT: 0 0 0 0 0
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PREQ START: OREQ STOP: ON: MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM UN	MON: TUE: WEE 0 0 0 24 24 24 6 6 6 16 16 1 MAR: APR: MAY:	D: THUR: FRI: SAT: 0 0 0 0 0 44 24 24 24 6 6 6 6 0 6 16 16 16 0 JUN: JUL: AUG: SEP: OC X X X X THERMOSTAT TYPE HOT DECK DEG F COLD DECK DEG F MIXED AIR DEG F O THER SETPOINT DESCRIP O OTHER SETPOINT DEG F	T: NOV: DEC: DUAL SETPOINT O O O O O O O O O O O O O O O O O O
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PREQ START: OREQ STOP: OREQ MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUN PRESENT TEMP SUN PRESENT TEMP SUN UNIN OA DMPR CONTROL	MON: TUE: WEE 0 0 0 24 24 24 6 6 6 16 16 1 MAR: APR: MAY:	D: THUR: FRI: SAT: 0 0 0 0 0 44 24 24 24 66 6 6 0 6 16 16 16 0 JUN: JUL: AUG: SEP: OC	T: NOV: DEC: DUAL SETPOINT: 0 0 0 0 0 0 T DEMAND LIMIT CNTRLS?
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: REQ START: OR REQ STOP: ON: DONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM PRESENT TEMP SUM PRESENT TEMP SUM PRESENT TEMP SUM PRESENT TEMP SUM PRESENT TEMP CONTROL MIN OA DMPR CONTROL	MON: TUE: WEE 0 0 0 24 24 24 6 6 16 16 1 MAR: APR: MAY:	D: THUR: FRI: SAT: 0	T: NOV: DEC: DUAL SETPOINT: 0: 0: 0: 0 T DEMAND LIMIT CNTRLS? N TIME CLOCK: Y
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: REQ STOP: ON: DONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM UNITED SUM PRESENT TEMP SUM PRESENT TEMP SUM PRESENT TEMP SUM PRESENT TEMP CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL	MON: TUE: WEE 0 0 0 24 24 24 6 6 16 16 1 MAR: APR: MAY: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	D: THUR: FRI: SAT: 0	T: NOV: DEC: DUAL SETPOINT: 0: 0: 0: 0 T DEMAND LIMIT CNTRLS? N TIME CLOCK: Y

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 11/8/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJNCWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUM	MBER: 7	670					BOILER	RM LOCA	ATION:	MER		
OILER UN	IT											
SOURCE OF B	LDG HEA	т ——	BLR/COI	NVERT	ER SER	VES ARE	A OR SE	ERVICE:	ALL			
BOILER BOILER BOILER FUEL	TAG: B	LR-1	S STEAM (1	5# TO 12	25#)	CON	ONVERTI VERTER VERTER	TAG:				·
CENTRAL	PLANT DI	RECT										
NAMEPLAT	E				% A	REA HE	ATED B	BB RAI	DIATION:			0
COMMENTS:	URNHAM L-30-G-W	EB						PUT (BTU PUT (BTU			782,000 1,308,000	
DAYS SCHEDULE SCHEDULE COMME	_	1						MONTH	SECHD	ULE NO		1
PRES START: PRES STOP: REQ START: REQ STOP:	SUN: 0 24 0	MON: 0 24 6 16	TUE: 0 24 6		D: TH 0 24 6 16	UR: 0 24 6 16	FRI: 0 24 6 16	SAT: 0 24 0 0				i
MONTHS JAN: ON:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	ост: ⊠	NOV:	DEC:	
CONTROLS												
TYPE OF I OPERA TYPE OF BURI	TING SET	POINT:	PNEUM		DEG F	or PSIG		RESE	T CONTR	ROLS: [Y	
CONTRO	LS COM	MENTS:										_

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 11/8/94

PREPARED BY: AJNCWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N	UMBER:	7670				BOILER	RM LOCA	ATION:	MER		
BOILER U	NIT										
SOURCE OF	BIDG HE		BLR/CON	VERTER SE	ERVES ARE	A OR SE	ERVICE:				
		1									:
● □ BOIL	_					ONVERT					
	ER TAG:				≓ ,	VERTER	==	CV-1			
	R TYPE:					ERTER		STM TO HT	HW ————		
- FUE	L TYPE:				CON	/ HT SOL	JRCE: E	BLR-1			
CENTRA	L PLANT D	IRECT									:
NAMEPLA	TE			9	% AREA HE	ATED BY	/ BB RAD	DIATION:			0
BOILER MFG:	NOT AVAI	LABLE			BLR C	AP OUTP	UT (BTU	H):		1	0
UNIT MODEL:					BLR	CAP INP	UT (BTU	н): 🔃			0
COMMENTS:											· ·
	1										
SCHEDUL	E										
DAYS SCHED SCHEDULE COM	=	1					MONTH	1 SECHE	ULE NO:		1
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				_
PRES START		0	0	0			0				
PRES STOP	====	24	24	24	24	24	24				
REQ START REQ STOP		16	<u>6</u> 16	<u>6</u>	<u>6</u> 	<u>6</u> –	0				1
MONTHS JAN	N: FEB:	MAR:	APR: I	MAY: JUI	N: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	:
ON. ⊠	\boxtimes	X	\boxtimes						\boxtimes	\boxtimes	· ·
CONTROL	.S										
TYPE C	F BLR CON	NTROLS:	PNEUM	ATIC			RESE [*]	T CONTE	ROLS: [N	
	RATING SE			0 DEG	F or PSIG						
TYPE OF BI											
CONT	ROLS COM	IMENTS:		<u>:</u>	·						
HW PUMP											
PUMP TAG			PUMF	HP:	0.		PUMP MF				
PUMP SERVICE	E: HW PUN	1P				PUI	MP MODE	EL:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 11/8/94

PREPARED BY: AJNCWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7670	BLDG NA	ME: DENTAL CLINIC	
REF. UNIT NUMBER/TAG:	: CH-1	LOCATION (MER# AHU'S SERVED	
UNIT	TYPE RECIPROCATING WITH	AIR COOLED CONDENSING UN	IIT .
NAMEPLATE			
CHILLER MFG:	CARRIER	TOWER MFG:	
	30GB090	# OF TOWER FANS:	8
	Q794171	TOWER FAN V:	460
CHILLER V:	460	TOWER FAN AMPS:	3
CHILLER AMPS:	<u>45</u> 3	TOWER FAN HP:	1.5
CHILLER PH: CHILLER CAP (TONS):	83		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE	NO: 1	MONTHS SCHEDULE N	0: 2
SCHEDULE COMMEN			
PRES START: 0		THUR: FRI: SAT: 0 0 0	:
PRES STOP: 24	: <u></u>	$ \begin{array}{c cccc} 0 & 0 & 0 \\ \hline 24 & 24 & 24 \end{array} $	
REQ START: 0		6 6 0	
REQ STOP: 0	16 16 16	16 16 0	:
MONTHS JAN: FEB:	MAR: APR: MAY: JUN	: JUL: AUG: SEP: C	CT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTR	ROLS: ELECTRIC		
CWS SETP		CNWS SETPOINT:	<u> </u>
CWR SETP	POINT: 0	CNWR SETPOINT:	<u> </u>
PRESS LI			TIORS:
PRESS LITE			
PRESS GAL		GES: [N]	
CONTROLS CO			
CW and CNW PI	JMPS		
PUMP TAG: 1	PUMP HP:	2 PUMP MFG:	
PUMP SERVICE: CW PUM	IP (Chilled Water)	PUMP MODEL:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

7670

FILE:

	AIR H	HANDLIN	G UNIT - HVAC	UPGRADE	OBSERVA	TIONS		
AHU NO.:	AHU-1	LOCATIO	N (Rm) MER					
AHU TYPE:	DD	MFG.:			MODEL:			
SZ - Single Zone		ating & Vntltno		an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit	Heater		Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	7.5 HP						DPR-ACT = Dampe	r Actuator
		***************************************	***************************************				RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:							***	
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:	 ,		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
INLET VANES	N/A:	OK: X	COMMENTS:					
RETURN AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
RETURN FAN MOTOR	OK: X	REPLACE		COMMEN				
COMMENTS:		1		100				
							·····	
	<u> </u>							
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP-ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	Actuator
							RP-BD = Replace B	ody
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
	· · · · · · · · · · · · · · · · · · ·	·						
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			
COMMENTS:			<u> </u>					~ - ~

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE: 7670.XLS

COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE:	R	EFRIGE	RATION E	QUIPMENT - HV	AC UPGRADE OBSERVATIONS	
Composition Composition	CHILLER / EQUIP. NO.	·	CH-1	LOCATION (RM)	OUTSIDE	
ASB-WCT = Reciprocating w/ Water Side Cooling Tower	REFG. EQUIP. TYPE:		R-ACCU		I Company of the Comp	
ASB-WCT = Reciprocating w/ Water Side Cooling Tower ASB-WCT = Absorption w/ Water Side Cooling Tower CCU = Air Cooled Condensing Unit CT = Cooling Tower CT = CT = CT CT = CT =	C-WCT = Centrifugal w/ W	ater Side Co	ooling Tower		•	
CT = Cooling Tower					•	
DOMP MOTOR N/A				CT = Co	oling Tower	
DOMP. MOTOR	COMP. MOTOR	N/A:	OK: X	REPLACE:		
Description	COMP. MOTOR	N/A:	OK: X	REPLACE:		
CTIACCU FAN MTR NIA: OK: X REPLACE: SIZE: CTIACCU FAN MTR NIA: OK: X REPLACE: SIZE: SIZE: CTIACCU FAN MTR NIA: OK: X REPLACE: SIZE: CTIACCU FAN MTR NIA: OK: REPLACE: SIZE: COMMENTS: COOLING TOWER NIA: X OK: REPLACE: SIZE: COOLING TOWER NIA: X OK: X REPLACE: SIZE: COMMENTS: COMMENTS: CHILLER INSUL. NIA: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. NIA: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR NIA: OK: X REPLACE: SIZE: SIZE: CHW PUMP MOTOR NIA: OK: X REPLACE: SIZE: COMP. MOTOR	N/A:	OK:				
DT/ACCU FAN MTR	COMP. MOTOR	N/A:	OK:			
OT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: COMMENTS: ESTIMATED QUANTITY: COMMENTS: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE:	CT/ACCU FAN MTR	N/A:	1			
COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE:	CT/ACCU FAN MTR	11	OK: X			
COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE:	CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:	COMMENTS:					
AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:	COOLING TOWER	IN/A· X	IOK.	TREPLACE:	ISIZE:	
CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:						
CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:		JE771.	JOH. A	1.2.0.02		
CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:	COMMENTS:					
CHW PIPE INSUL. OK: X MISSING: ESTIMATED QUANTITY: CHW PUMP MOTOR OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:	CHILLER INSUL	IN/A:	IOK: X	IMISSING:	ESTIMATED QUANTITY:	
CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:					IESTIMATED QUANTITY:	
CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:	CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:			ок: х	REPLACE:	SIZE:	
CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:	CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:			OK: X	REPLACE:	SIZE:	
CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:	CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS N/A: OK: X REPLACE: SIZE:		N/A:	OK: X	REPLACE:	SIZE:	
	CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
	CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
		N/A:	JON. A	REPLACE.	OILL.	

7670

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 8 Nov-94

CHECKED BY:

CWW AJN

BLDG: 7670 FILE: 7670.XLS **BOILER & CONVERTER - HVAC UPGRADE OBSERVATIONS** BOILER/CONVERTER NO. BLR-1 LOCATION (RM) BOILER TYPE: STM MFG.: MODEL: **BURNHAM** EL-30-G-W-B CONVERTER TYPE: MFG.: MODEL: STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HW - Hot Water :HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: OK: REPLACE: Χ COMMENTS: BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE: BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X MISSING: **ESTIMATED QUANTITY:** PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X REPLACE: OK: SIZE: HW PUMP SEALS OK: N/A: X REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X ЮК: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: NEW BOILER, 1992. CONDENSATE TANK (12" X 15" X 17") RUSTED. **DUNHAM-BUSH CRV620-8** CV PUMP MOTOR N/A: OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV INSULATION OK: MISSING: N/A: **ESTIMATED QUANTITY:** CV PIPE INSUL. N/A: OK: MISSING: **ESTIMATED QUANTITY:** COMMENTS:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE: 7670.XLS

	BOIL			UPGRADE OBSERVATIONS
BOILER/CONVERTER NO).	CV-1	LOCATION (RM)	MER
BOILER TYPE:			MFG.:	MODEL:
CONVERTER TYPE:		STM/HW	MFG.: TACO	MODEL:
STM - Steam		- Steam to Ho		HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water			o. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSE	PHERIC:	POWER:	OK: REPLACE:
COMMENTS:				
BLR PUMP MOTOR	N/A:	lok:	IREPLACE:	SIZE:
BLR PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:	IVA.	1011.	11000.	JOZZE.
OUMINIEM 13.				
BLR INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:	CONV =	5' X 8" DIA.		
			· - · · · · · · · · · · · · · · · · · ·	
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:				
CV PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: ~1/12 HP
CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
COMMENTS:				
6 / W 6 / W 4 T 6 · ·	Water	lou v	IMIOONIC	TOTIMATED QUANTITY.
CV INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				
				·

7670

BLDG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/9/94

LOCATION: FT. RILEY, KS

PREPARED BY: CWW/AJN

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7245 BL

BLDG NAME: ENL PERS DIN

ELECTRIC METER: N

CONDITIONED SQFT:

13,998

GAS METER: N
SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 23

FRI: THUR: SAT: MON: TUE: WED: SUN: 0 0 0 0 0 0 PRES START: 0 24 24 24 24 24 PRES STOP: 24 5 5 5 6 5 5 REQ START: 6 REQ STOP: 24 24 24 24 24 24 24

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/9/94 PREPARED BY: CWW/AJN

BUILDING NUMBER:	7245	AUUL OCATION MEZZ	
AHU NUMBER:	AHU-1	AHU LOCATION: MEZZ	
REFRIG SYS # SRVNG AHU		SERVES AREA: DINNING AREA HEATED:	0
AHU UNIT TYPE SINGLE	ZONE	NUMBER OF ZO	NES IF MZ UNIT: 0
CFM-HTG:	0	CFM-CLG:	7,000
MIN %OA:	30	MAX %OA:	100
NAMEPLATE			
UNIT MFG:	RANE CLIMATE CHANGER	UNIT MODEL: 2	2-15A
SUPPLY FAN HP:	5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	OSHEBA	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	The state of the s	RET/EXH FAN MTR MODEL:	
COMMENTS:			**************************************
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	IONE		
HEATING COIL:	IONE	- 6	
REHEAT COIL:	IONE		
HUMIDIFIER:	IONE		
COOLING COIL:	CW .		
SCHEDULE			
DAY SCHEDULE NO:	23	MONTH SC	HEDULE NO: 2
SCHEDULE COMMENTS:			
SUN: N	ION: TUE: WED: THE	JR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	:
PRES STOP: 24	24 24 24	24 24 24	1
REQ START: 6	5 5 5	5 5 6	
REQ STOP: 24	24 24 24	24 24 24	
	AR: APR: MAY: JUN:	JUL: AUG: SEP: OCT	T: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTRO	DLS: PNEUMATIC	THERMOSTAT TYPE	: SINGLE SETPOINT
PRESENT TEMP WINTR	OCC: 0	HOT DECK DEG F	
PRESENT TEMP WINTR UNG	OCC: 0	COLD DECK DEG F MIXED AIR DEG F	
PRESENT TEMP SUM (OCC: 0	OTHER SETPOINT DESCRIP	
PRESENT TEMP SUM UNO		OTHER SETPOINT DEG F:	
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: N IMPLEMENT	DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL:	Y ECONOMIZER DB	=	TIME CLOCK: N
RET AIR DMPR CONTROL:	Y ECONOMIZER WB	CONTROL: N TIM	E CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL:	N		
OTHER CONTROLS DES			
CONTROLS COMME	115:		!

EXH AIR DMPR CONTROL: N OTHER CONTROLS DESCR: **CONTROLS COMMENTS:**

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/9/94

PREPARED BY: CWW/AJN LOCATION: FT. RILEY, KS AIR HANDLING UNIT SURVEY OBSERVATIONS **BUILDING NUMBER: 7245** AHU NUMBER: AHU-2 AHU LOCATION: MEZZ SERVES AREA: DINNING REFRIG SYS # SRVNG AHU: CH-1 % OF BLDG AREA HEATED: NUMBER OF ZONES IF MZ UNIT: AHU UNIT TYPE SINGLE ZONE CFM-CLG: 7,250 0 CFM-HTG: 30 MAX %OA: MIN %OA: NAMEPLATE UNIT MFG: TRANE CLIMATE CHANGER UNIT MODEL: 2-15A **RET/EXH FAN HP:** SUPPLY FAN HP: **RET/EXH FAN MTR MFG:** SUPPLY FAN MTR MFG: TOSHEBA **RET/EXH FAN MTR MODEL:** SUPPLY FAN MTR MODEL: COMMENTS: COILS Modulating Valve? Coil Coil Type PREHEAT COIL: NONE HEATING COIL: NONE REHEAT COIL: NONE HUMIDIFIER: NONE COOLING COIL: CW SCHEDULE MONTH SCHEDULE NO: DAY SCHEDULE NO: SCHEDULE COMMENTS: THUR: FRI: SAT: SUN: MON: TUE: WED: PRES START: 0 0 0 0 0 0 24 24 24 24 PRES STOP: 24 24 6 5 5 5 5 **REQ START:** 6 24 24 24 24 REQ STOP: 24 24 24 DEC: MAR: APR: JUN: JUL: AUG: SEP: OCT: NOV: MONTHS JAN: FEB: MAY: ON: \boxtimes \boxtimes \boxtimes \boxtimes CONTROLS TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT **HOT DECK DEG F:** 0 PRESENT TEMP WINTR OCC: **COLD DECK DEG F:** 0 0 PRESENT TEMP WINTR UNOCC: MIXED AIR DEG F: 0 OTHER SETPOINT DESCRIP: 0 PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: OTHER SETPOINT DEG F: MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N MIN OA DMPR CONTROL: N TIME CLOCK: ECONOMIZER DB CONTROL: N MAX OA DMPR CONTROL: Y TIME CLOCK OPERATIONAL? RET AIR DMPR CONTROL: Y ECONOMIZER WB CONTROL: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

NTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS DATE: 10/9/94
PREPARED BY: CWW/AJN

		· · · · · · · · · · · · · · · · · · ·
	BUILDING NUMBER: 7245 AHU NUMBER: HV-1	National Control of the Control of t
	REFRIG SYS # SRVNG AHU:	
	REFRIG 313 # SKVNG ARU.	SERVES AREA: KITCHEN % OF BLDG AREA HEATED: 24
	AHU UNIT TYPE HEATING AND	O VENTILATING NUMBER OF ZONES IF MZ UNIT: 0
	CFM-HTG:	11,400 CFM-CLG: 0
	MIN %OA:	100 MAX %OA: 100
١	IAMEPLATE	
	UNIT MFG: TRANS	E TORRIENT UNIT MODEL: 217-1
	SUPPLY FAN HP:	5 RET/EXH FAN HP: 0
	SUPPLY FAN MTR MFG: CENTU	JRY RET/EXH FAN MTR MFG:
	SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
	COMMENTS:	
	COILS	
	Coil	Coil Type Modulating Valve?
	PREHEAT COIL: NONE	
	HEATING COIL: STEAM	
	REHEAT COIL: NONE	
	HUMIDIFIER: NONE COOLING COIL: NONE	
_		
S	CHEDULE	
	DAY SCHEDULE NO: 23	MONTH SCHEDULE NO: 1
	SCHEDULE COMMENTS:	
	SUN: MON:	TUE: WED: THUR: FRI: SAT:
	PRES START: 0 0	
	PRES STOP: 24 24 REQ START: 6 5	<u>24</u> <u>24</u> <u>24</u> <u>24</u> <u>24</u> <u>6</u>
	REQ STOP: 24 24	5 5 5 5 6 24 24 24 24 24
_		
N	MONTHS JAN: FEB: MAR: ON:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
2	ONTROLS	
	TYPE OF CONTROLS:	PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT
	PRESENT TEMP WINTR OCC:	0 HOT DECK DEG F: 0
	PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F: 0
	PRESENT TEMP SUM OCC:	MIXED AIR DEG F: 0 O OTHER SETPOINT DESCRIP:
	PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DEG F: 0
	MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
	MAX OA DMPR CONTROL: Y	ECONOMIZER DB CONTROL: N TIME CLOCK: N
	RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N
	EXH AIR DMPR CONTROL: N	
	OTHER CONTROLS DESCR:	
	CONTROL & COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/9/94

LOCATION: FT. RILEY, KS

PREPARED BY: CWW/AJN

EMC NO: 1406-001

BUILDING NUMBE				AHU I C	CATION	ı: KITCI	HEN ME	77		_
										
REFRIG SYS # SRVNG A	.но:	%	OF BLDG A			KITCHE	IN		8	
AHU UNIT TYPE HEA	TING AND	VENTILATIN	G	·	NL	JMBER C	F ZONE	S IF MZ	UNIT:	0
7,100,1112										
CFM-HTG	<u> </u>	3,600	=		M-CLG:			0		
MIN %OA	:	100	<u>)</u>	MAX	X %OA:	<u> </u>		100		
NAMEPLATE										
UNIT MFG			,	:	UN	IT MODE	L: 🗆			
SUPPLY FAN HP	:	1.5			RET/EX	H FAN H	P:		0	
SUPPLY FAN MTR MFG	:			RET/E	XH FAN	MTR MF	G:			
SUPPLY FAN MTR MODEL	:		RI	ET/EXH	FAN MT	RMODE	L:	·····		
COMMENTS	:									
COILS										<u>, , , , , , , , , , , , , , , , , , , </u>
Coil	(Coil Type		Mod	dulating	Valve?				
PREHEAT COIL	: NONE									
HEATING COIL	: STEAM									
REHEAT COIL	: NONE			_				•		
HUMIDIFIER				_ <u> </u>						
COOLING COIL	: NONE									
SCHEDULE										
DAY SCHEDULE NO:	23					MONT	H SCHE	DULE NO	D:	<u> 1</u>
SCHEDULE COMMENTS:										
SUN:	MON:	TUE: V	VED: THU	R: I	FRI:	SAT:				
PRES START: 0	0	0	0	0	0	0				
PRES STOP: 24	24	24	24 2	24	24	24				
REQ START: 6	5	5	5	5	5	6				
REQ STOP: 24	24	24	242	24	24	24				:
MONTHS JAN: FEB:	MAR:	APR: MAY	: JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	4
ON:	\boxtimes					П	\boxtimes	\boxtimes	\boxtimes	
CONTROLS				<u> </u>						<u>'</u>
		DATE HATO			TUEDI	LOSTAT:	D/DE.	CINCLE	CETDOU	
TYPE OF COM	TROLS:	PNEUMATIC				MOSTAT DECK D		SINGLE	SETPOII	0
PRESENT TEMP WIN	IR OCC:		0			DECK D			*.	0
PRESENT TEMP WINTR	UNOCC:		0			ED AIR D			·	0
PRESENT TEMP SU	JM OCC:		0	OTHER	RSETPO	INT DES	CRIP:			
PRESENT TEMP SUM			0			POINT D				0
MIN OA DMPR CONTRO	DL: N	MIXED A	AIR DMPR C	ONTRO	L: N	IMPLE	MENT [DEMAND	LIMIT CI	NTRLS? N
MAX OA DMPR CONTRO	=		MIZER DB C		=					CLOCK: N
RET AIR DMPR CONTRO	=		MIZER WB C		_		TIME	CLOCK (OPERAT	IONAL? N
EXH AIR DMPR CONTRO	=					•				
OTHER CONTROLS	DESCR-									
CONTROLS CON										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/9/94

LOCATION: FT. RILEY, KS

PREPARED BY: CWW/AJN

_			
		7245 HV-3 AHU LOCATION:	KITCHEN MEZZ
	REFRIG SYS # SRVNG AHU:	SERVES AREA:	DISHWASHING
	NEI NIO 010 # SIVVIO AIIO.	% OF BLDG AREA HEATED:	2
	AHU UNIT TYPE HEATING	AND VENTILATING NUM	MBER OF ZONES IF MZ UNIT: 0
	CFM-HTG:	1,000 CFM-CLG:	0
	MIN %OA:	100 MAX %OA:	100
١	IAMEPLATE		
	UNIT MFG: TR	ANE TORRIVENT UNIT	MODEL: 210-1
	SUPPLY FAN HP:	1 RET/EXH	FAN HP: 0
	SUPPLY FAN MTR MFG: KIN	NGSTON-COML RET/EXH FAN M	ITR MFG:
	SUPPLY FAN MTR MODEL: 945	57 RET/EXH FAN MTR	MODEL:
	COMMENTS:		
2	COILS		
	Coil	Coil Type Modulating V	alve?
	PREHEAT COIL: NO	DNE 🗆	
	HEATING COIL: STI		
	REHEAT COIL: NO	DNE	
	HUMIDIFIER: NO	DNE	
	COOLING COIL: NO	DNE 🖂	
S	CHEDULE		
	DAY SCHEDULE NO:	23	MONTH SCHEDULE NO: 1
	SCHEDULE COMMENTS:		
	SUN: MO	MI THE MED THUR. FR. C.	A.T.
	PRES START: 0		<u>AT:</u>
		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	<u>0</u> 24
	REQ START: 6		6
		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	24
			<u></u>
N	MONTHS JAN: FEB: MAR ON:		SEP: OCT: NOV: DEC:
2	ONTROLS		
	TYPE OF CONTROL		STAT TYPE: SINGLE SETPOINT
	PRESENT TEMP WINTR OC	C: 0	DECK DEG F: 0
	PRESENT TEMP WINTR UNOC	C: 0	DECK DEG F: 0
	PRESENT TEMP SUM OC		O AIR DEG F: 0
	PRESENT TEMP SUM UNOC		
	MIN OA DMPR CONTROL:	N MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS? N
	MAX OA DMPR CONTROL:	Y ECONOMIZER DB CONTROL: N	TIME CLOCK: N
	RET AIR DMPR CONTROL:	N ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL? N
	<u>}=</u>	N	
	OTHER CONTROLS DESC CONTROLS COMMENT		
	CONTINUED COMMENT	○ .	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/9/94

PREPARED BY: CWW/AJN

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER:	7245	BOILER RM LOCATION: MER	
OILER UNIT			
SOURCE OF BLDG H		RVES AREA OR SERVICE: SPACE HEAT & D	HW
A ST POUED		CONVERTER	
BOILER TAG:	BLR-1	CONVERTER TAG:	<u> </u>
BOILER TYPE:	MED PRESS STEAM (15# TO 125#)	CONVERTER TYPE:	,
FUEL TYPE:	NAT. GAS	CONV HT SOURCE:	
CENTRAL PLANT	DIRECT		
IAMEPLATE	%	AREA HEATED BY BB RADIATION:	66
BOILER MFG: BURNHA	AM :	BLR CAP OUTPUT (BTUH): 5	657,000
UNIT MODEL: 4FL-675			071,000
COMMENTS:			:
COMMENTS.			:
CHEDULE			
DAYS SCHEDULE NO:	23	MONTH SECHDULE NO:	3
SCHEDULE COMMENTS:			
SUN	: MON: TUE: WED:	THUR: FRI: SAT:	
PRES START:	0 0 0	0 0	!
PRES STOP: 2		24 24 24	
	$\frac{6}{4} = \frac{5}{24} = \frac{5}{24} = \frac{5}{24}$	5 5 6 24 24 24	!
REQ STOP: 2	4 24 24 24	24 24 24	i
MONTHS JAN: FEB	MAR: APR: MAY: JUN	N: JUL: AUG: SEP: OCT: NOV:	DEC:
ON:			
CONTROLS			
011111000			
TYPE OF BLR CO	ONTROLS: PNEUMATIC	RESET CONTROLS: N	7
		RESET CONTROLS: N	
TYPE OF BLR CO	SETPOINT: 10 DEG]

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/9/94

PREPARED BY: CWW/AJN

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N	UMBER: 7	'245	AL SPANISHED AND				BOILER	RM LOC	ATION:	MEZZ		
BOILER U	NIT											
SOURCE OF	BLDG HEA	ΛT	BLR/COI	VERTE	R SER	VES ARE	EA OR SI	ERVICE:	PERIM	ETER RA	DIATION	1
. ● □ BOIL	ER					X C	ONVERT	FR	*			
	ER TAG:	,				_	VERTER		CV-1			
BOILE	R TYPE:		Account of the second of the s			CON	/ERTER	TYPE:	STM TO HT	HW		
FUE	L TYPE:					CON	V HT SOI	JRCE:	BLR-1			
CENTRA	L PLANT D	IRECT										·
NAMEPLA	TE				% A	REA HE	ATED B	Y BB RA	DIATION:			66
BOILER MFG:	OLD DOMI	NION				BLR C	AP OUTF	UT (BTU	JH):			0
UNIT MODEL:	50254					BLR	CAP INF	UT (BTU	JH):			0
COMMENTS:		***										
SCHEDUL	E							 				_
DAYS SCHEDU SCHEDULE COM	=	23						MONT	H SECHD	ULE NO:		1
	SUN:	MON:	TUE:	WED	D: TH	IUR:	FRI:	SAT:				manufacture and
PRES START		0	0		0	0	0	0				:
PRES STOP REQ START		5	5	2	<u>4</u>	<u> 24</u> =	24 5	<u>24</u> 6				
REQ STOP		24	24	2	4		24	24				
MONTHS JAN	: FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	\boxtimes	\boxtimes								\boxtimes	\boxtimes	<u></u>
CONTROL	S											
OPEI TYPE OF BU		TPOINT: ITROLS:	PNEUM		DEG F	or PSIG		RESE	ET CONTR	ROLS: [N	
CONI	ROLS COM	MICN 12:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

PREPARED BY: CWW/AJN

DATE: 10/9/94

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7245		BLDG NAM	E: ENLP	ERS DIN			
REF. UNIT NUMBER/TAG	: CWP-1			LOCATION (M		ER	
				AHU'S SEF	RVED: A	HU-1, 2	
UNIT	TYPE OTHER						
NAMEPLATE							
CHILLER MFG:			T	OWER MFG:			
CHILLER MODEL:			# OF TO	WER FANS:			0
CHILLER SERIAL NO:			TO	WER FAN V:			0
CHILLER V:		0	TOWER	FAN AMPS:	<u> </u>		0
CHILLER AMPS:		0	TOW	ER FAN HP:			0
CHILLER PH:		0					
CHILLER CAP (TONS):		0					
COMMENTS:							
SCHEDULE							
DAYS SCHEDULE	: NO: 25	5	MON.	THS SCHEDU	E NO:	2	
SCHEDULE COMME	NTS:						
011		- 1455 711		DI CAT			i
SUN	I: MON: TU	E: WED: TH	UR: F	RI: SAT:			
PRES START:		0 0 IH	0 F	0 0			
PRES START:	0 0	0 0	0				
PRES START: PRES STOP: 2	0 0			0 0			
PRES START: PRES STOP: 2 REQ START:	0 0 4 24 0 5	0 0 24 24	0 24	0 0			
PRES START: PRES STOP: 2 REQ START:	0 0 4 24 0 5 0 20	0 0 24 24 5 5 20 20	0 24 5 20	0 0 24 24 5 0 20 0			
PRES START: PRES STOP: 2 REQ START: REQ STOP: MONTHS JAN: FEB	0 0 4 24 0 5 0 20	0 0 24 24 5 5	0 24 5 20	0 0 24 24 5 0	OCT:	NOV:	DEC:
PRES START: PRES STOP: REQ START: REQ STOP:	0 0 4 24 0 5 0 20	0 0 24 24 5 5 20 20	0 24 5 20	0 0 24 24 5 0 20 0	ОСТ:	NOV:	DEC:
PRES START: PRES STOP: 2 REQ START: REQ STOP: MONTHS JAN: FEB: ON:	0 0 4 24 0 5 0 20 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 24 24 5 5 20 20 MAY: JUN:	0 24 5 20 JUL:	0 0 24 24 5 0 20 0		_	_
PRES START: PRES STOP: 2 REQ START: REQ STOP: MONTHS JAN: FEB: ON: CONTROLS	0 0 4 24 0 5 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 24 24 5 5 20 20 MAY: JUN:	0 24 5 20 JUL:	0 0 24 24 5 0 20 0		_	_
PRES START: PRES STOP: 2 REQ START: REQ STOP: MONTHS JAN: FEB: ON:	0 0 4 24 0 5 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 24 24 5 5 20 20 MAY: JUN:	0 24 5 20 JUL:	0 0 24 24 5 0 20 0		_	_
PRES START: PRES STOP: 2 REQ START: REQ STOP: MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONTROLS	0 0 4 24 0 5 0 20 0 20 C C C C C C C C C C C C C C C	0 0 24 24 5 5 20 20 MAY: JUN: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0 24 5 20 JUL:	0 0 24 24 5 0 20 0		_	
PRES START: PRES STOP: 2 REQ START: REQ STOP: MONTHS JAN: FEB: ON: CONTROLS	0 0 4 24 0 5 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 24 24 5 5 20 20 MAY: JUN:	0 24 5 20 JUL: ⊠	0 0 24 24 5 0 20 0 C SEP:	:	_	_
PRES START: PRES STOP: 2 REQ START: REQ STOP: MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONTI	0 0 4 24 0 5 0 5 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 24 5 20 JUL: ⊠	0 0 24 24 5 0 20 0 0 AUG: SEP:			0
PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: FEB: ON: TYPE OF CONTI CWS SETI CWR SETI CWR SETI	0 0 4 24 0 5 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 24 24 5 5 20 20 MAY: JUN: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	JUL: CNV CNV	0 0 24 24 5 0 20 0 0 AUG: SEP: ⊠			0
PRES START: PRES STOP: PRES STOP: PREQ START: REQ STOP: MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONTI CWS SETI CWR SETI PRESS LITE	O O O O O O O O O O O O O O O O O O O	0 0 24 24 5 5 20 20 MAY: JUN: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0 24 5 20 JUL: ☑ CNV CNV	0 0 24 24 5 0 20 0 0 AUG: SEP:			0
PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONTI CWS SET! CWR SET! PRESS LITE PRESS GA	O O O O O O O O O O O O O O O O O O O	0 0 24 24 5 5 20 20 MAY: JUN: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0 24 5 20 JUL: ☑ CNV CNV	0 0 24 24 5 0 20 0 0 AUG: SEP:			0
PRES START: PRES STOP: PRES STOP: PREQ START: REQ STOP: MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONTROLS CWS SETI CWR SETI PRESS LITE PRESS GA CONTROLS CO	O O O O O O O O O O O O O O O O O O O	0 0 24 24 5 5 20 20 MAY: JUN: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0 24 5 20 JUL: ☑ CNV CNV	0 0 24 24 5 0 20 0 0 AUG: SEP:			0
PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: FEB: ON: TYPE OF CONTI CWS SET! CWR SET! PRESS LITE PRESS GA CONTROLS CO	O O O O O O O O O O O O O O O O O O O	0 0 24 24 5 5 20 20 MAY: JUN: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0 24 5 20 JUL: ☑ CNV CNV	0 0 24 24 5 0 20 0 0 AUG: SEP:			0
PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONTI CWS SET! CWR SET! PRESS LITE PRESS GA	O O O O O O O O O O O O O O O O O O O	0 0 24 24 5 5 20 20 MAY: JUN: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	0 24 5 20 JUL: ☑ CNV CNV	0 0 24 24 5 0 20 0 0 AUG: SEP:	DICATIOR	S:	0

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

-OOATION.TT.MLLT, TO	NOAS					CHECKE	UBT:	AJI
			BLDG:	7245		FILE:	7245.XLS	
·	AIR	HANDLIN	G UNIT - HVA	C UPGRADE (OBSERVA	TIONS	30.413.410.100	
AHU NO.:	AHU-1	LOCATIO		ZZANINE				
AHU TYPE:	SZ	MFG.:	TRANE		MODEL:	TYPE 2-1		
SZ - Single Zone		ating & Vntltng	. FC	- Fan Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe	9)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		IT - Reheat System				
DD - Dual Duct	UH - Unit	Heater	INI	O - Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	Χ
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	OA/RA IN	TERLOCKED					DPR-ACT = Damp	er Actuator
			12 17			****	RP-ACT = Replac	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:						**		
770 000					·····			
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	TS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	[COMMEN]	TS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN.		N/A		
COMMENTS:								***
				71.1			·	
			······································					
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	e Actuator
							RP-BD = Replace	
							· · · · · · · · · · · · · · · · · · ·	

AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
	N/A:	JOK: X	MISSING:	ESTIMATE	D QUANTITY:			
COMMENTS:	N/A: N/A:		MISSING:	L				
COMMENTS: PIPE INSULATION DUCT INSULATION		OK: X		L	ED QUANTITY: ED QUANTITY:			
COMMENTS: PIPE INSULATION				L				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

FILE: 7245.XLS

			3 UNIT - HVAC U		CDOLIVAX	110110		
HU NO.:	AHU-2	LOCATION			IMODEL.	2-15A		
HU TYPE:	SZ	MFG.:	TRANE CLIMATE CH		MODEL:			
Z - Single Zone		ating & Vntltng.		n Coil (Indicate 2	zP for z Pipe or	4P for 4 Pipe	=)	
IZ - Mulitzone		iable Air Vol.		Reheat System				
D - Dual Duct	UH - Unit F			duction System	DDD ACT	NOV. V	IDD ACT	
).A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK: OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	JUN:		
OMMENTS:	OA/RA IN	TERLOCKED;					DPR-ACT = Damper	
							RP-ACT = Replace	Actuator
				10/55		·		
ILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
UPPLY AIR FAN	OK: X		FAN BEARINGS:	COMMEN				
UPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	NTS:			
COMMENTS:								

COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:*	RP-BD:
,0020	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
FATING COIL	IIIV/A. A			SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
		OK:	REPLACE:	JOIZE.	CNILVLV	110 · · ·		
REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X	ок:				LII.		
PREHEAT COIL REHEAT COIL	N/A: X N/A: X					LII.	RP- ACT:	Actuator
REHEAT COIL	N/A: X N/A: X	ок:				LII.	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL	N/A: X N/A: X	ок:				LII.	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X *2" CONT	OK: ROL VALVE	REPLACE:			LII.	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X *2" CONT	OK: ROL VALVE	REPLACE:	SIZE:		LII.	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X *2" CONT	OK: ROL VALVE	REPLACE:	SIZE:		LII.	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X *2" CONT	OK: ROL VALVE	REPLACE:	SIZE:		LII.	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X *2" CONT	OK: ROL VALVE	REPLACE:	SIZE:		LII.	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X *2" CONT	OK: ROL VALVE OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	ок:	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X N/A: X *2" CONT	OK: ROL VALVE OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV ED QUANTITY	ОК:	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: X N/A: X *2" CONT	OK: ROL VALVE OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	ОК:	RP-ACT:	Actuator
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X N/A: X *2" CONT	OK: ROL VALVE OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV ED QUANTITY	ОК:	RP-ACT:	Actuator

7245

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

BLDG:

7245

FILE: 7245.XLS

*************************************			A LINUT IN (A A	LIDCDADE	ODCEDVA:	TIONS		
	AIR I	HANDLIN	IG UNIT - HVAC	UPGRADE	ODSEKVA	LIONS		
AHU NO.:	H&V-1	LOCATIO	, ,	ZANINE				
AHU TYPE:	H&V	MFG.:	TRANE TORRIVE		MODEL:	217-1		
SZ - Single Zone	H&V - Hea	ating & Vntltng	FC -	Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	9)	
MZ - Mulitzone		iable Air Vol.		- Reheat System				
DD - Dual Duct	UH - Unit		IND -	Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	Χ
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	OA DAMP	ER LINKAGE	DISCONNECTED			·	DPR-ACT = Damp	er Actuator
	B. C. L		····				RP-ACT = Replace	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	Moiz. v	IDED: ACE	FAMBLADINGS	Iconne	TO.			
SUPPLY FAN MOTOR	OK: X		FAN BEARINGS:	COMMEN				
OUTTLE FAN MUTUR	OK: X	REPLACE	:	COMMEN	18:			
	NIZA NZ	TOIZ	LOCALIENTS					
INLET VANES	N/A: X	OK:	COMMENTS:					
INLET VANES RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN				
INLET VANES RETURN AIR FAN RETURN FAN MOTOR			FAN BEARINGS:	COMMEN				
INLET VANES RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARINGS:					
INLET VANES RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARINGS:					
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK:	REPLACE	FAN BEARINGS:	COMMEN	TS:	Jok:	IRP- ACT	IRP-BD
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK: OK:	REPLACE REPLACE	FAN BEARINGS:	COMMEN	TS:	OK:	RP- ACT:	RP-BD
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK: N/A: X	REPLACE REPLACE	FAN BEARINGS:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: X N/A:	REPLACE REPLACE OK: OK:	REPLACE:	COMMEN	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A: N/A: X	REPLACE REPLACE OK: OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A: N/A: X	REPLACE REPLACE OK: OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A: N/A: X	REPLACE REPLACE OK: OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A: N/A: X	REPLACE REPLACE OK: OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:	OK: OK: N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS:	OK: OK: N/A: X N/A: N/A: X N/A: X N/A: X	REPLACE OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace I	RP-BD RP-BD RP-BD Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	OK: OK: N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD Actuator

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

7245

FILE:

			G UNIT - HVAC		UDSERVA	10149		
AHU NÖ.:	H&V-2	LOCATIO	N (Rm) MEZZ	ANINE			-4007	
AHU TYPE:	H&V	MFG.:			MODEL:			
SZ - Single Zone		ating & Vntltng	,	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit			nduction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIŽE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X		FAN BEARINGS:	COMMEN				
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	NTS:	N/A		
COMMENTS:								
COMMENTS:								
COMMENTS:					1440			
COMMENTS:	N/A: X	lok:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: OK: X	RP- ACT:	RP-BD:
COOLING COIL								RP-BD:
COOLING COIL HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A:	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

7245

FILE:

-1 I N ∩ ·	H&V-3	LOCATIO	G UNIT - HVAC UNIT - MEZZA			. 10110		
.HU NO.: .HU TYPE:	H&V-3	MFG.:	TRANE TORRIVENT		IMODEL.	010.1		
SZ - Single Zone		ating & Vntltng		n Coil (Indicate :	MODEL:	210-1	۵)	
MZ - Mulitzone		aնng & vnննով iable Air Vol.		in Coil (Indicate . Reheat System	2P for 2 Pipe or	4P for 4 Pip	ie)	
DD - Dual Duct	UH - Unit			duction System				
O.A. DAMPER	N/A:	OK: X	IREPLACE:	SIZE:	DDD ACT	707	IDD ACT.	V*
R.A. DAMPER	N/A: X	OK: X	REPLACE:	SIZE:	DPR-ACT DPR-ACT	OK:	RP- ACT:	X*
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:		IS DISCONI		JOIZL.	DEIX-ACT	JON.		
JOIVIIVIEINTS.	LINNAGE	12 DI2COM	NECIED				DPR-ACT = Dampe	
	**					W-W-1	RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	TREPLACE	E FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		ICOMMEN				
NLET VANES	N/A: X	OK:	COMMENTS:	100				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS [,]	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
TE FOR THE FOR		THE BROD		JOONNILIN	110.	IVA		
COMMENTS								
COMMENTS:								
	Maya. V	Tok:	IDEDI ACE.	IOIZE.	CNITUVIN	Nov.	IDD ACT	IDD DD
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL	N/A:	ок: х	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A:	ок: х	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

7245

FILE:

	REFRIGE	RATION I	EQUIPMENT - H	VAC UPGRADE OBSERVATIONS	
CHILLER / EQUIP. NO.		CWP-1	LOCATION (RM)	MER	
REFG. EQUIP. TYPE:		C.PLANT	MFG.:	MODEL:	
C-WCT = Centrifugal w/ \			and the second s	U = Reciprocating w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating v		e Cooling Tow		CT = Absorption w/ Water Side Cooling Tower	
ACCU = Air Cooled Cond	Jensing Unit			ooling Tower	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
OMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A: X	OK:	REPLACE:	ISIZE:	
COMMENTS:		15			
COMMENTO.					
CHILLER INSUL.	N/A: X	OK:	MISSING:	JESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING: X	ESTIMATED QUANTITY: 10 SF	
			ON CHW PUMP	LOTHIN TED CONTINUE	
COMMENTS:	INSULATIO	ON MISSING (JN CHW PUMP		
					
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:					
OOMMENTO.					
		 			
					<u></u>

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7245

FILE:

	BOILE	R & CON	VERTER -	HVAC UP	GRADE	OBSER\	/ATIONS	
BOILER/CONVERTER NO).	BLR-1	LOCATION	(RM)	MER			
BOILER TYPE:		STM	MFG.:	BURNHAM	· · · · · · · · · · · · · · · · · · ·	MODEL:	4FL-675A-40	0-G-PF
CONVERTER TYPE:			MFG.:			MODEL:		
STM - Steam		Steam to Hot		·		-	p HW to Steam	Convertor
HW - Hot Water			. HW to HW C	V		mestic Hot Wa	ater Convertor	
BOILER BURNER	ATMOSPI	HERIC:	POWER:	Х	OK:	X	REPLACE:	
COMMENTS:								
A. 11-0-2000 PROJECTO								11.7.4
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:								···
DI D INOU ATION	Thurs .	101/ 1/	Turcoure		Teornia	-0.011412717		
BLR INSULATION	N/A:	OK: X	MISSING:		1	ED QUANTITY		001 0 4
PIPE INSULATION	N/A:	OK:	MISSING:	Х	ESTIMATE	ED QUANTIT	Y:	30' @ 4"
COMMENTS:								
	10			- Ta	Ta.m.			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:	 	* .	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			····
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	· · · · · · · · · · · · · · · · · · ·	SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:	1017		
COMMENTS:	NO INSUL	TATION ON B	OILER FLUE ~	· 25' @ 24" DI/	A, 2-1/2" TH	ICK		
CV DUMP MOTOR	TNI/A. V	Toy.	IREPLACE:		TOIZE.			
CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X	OK:			SIZE:			
	IN/A: X	JUK:	REPLACE:		SIZE:			
COMMENTS:								
	····		· .					
CV/INICHII ATIONI	INIA. V	IOIZ:	IMICOING		ICOTUANT!	TO OUANTE		
CV INSULATION	N/A: X	OK:	MISSING:			ED QUANTITY		**
CV PIPE INSUL.	N/A: X	OK:	MISSING:	P. C. W 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	LESTIMATI	ED QUANTIT	Y:	***************************************
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

7245 FILE:

FILE: 7245.XLS

BOILER TYPE: TYPICAL OF 2		BOILE	R & CON		UPGRADE OBSERVATION	S
CONVERTER TYPE: DHW STM/HW MFG.: MODEL: STM - Steam STM/HW - Steam to Hot Water Conv. HTHWSTM - High Temp HW to Steam Convertor HW - Hot Water HTHWHW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: OK. REPLACE: COMMENTS: BLR PUMP MOTOR N/A: X OK. REPLACE: SIZE: SIZE: COMMENTS: BLR PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: COV PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: COMMENTS: SIZE: SIZ	BOILER/CONVERTER NO.					
STM: Steam STM: W - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor DHW - Lowers (HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor DHW - DHW - Domestic Hot Water Convertor DHW - DHW - DHW - Domestic Hot Water Convertor DHW - DHW - Domestic Hot Water Convertor DHW - DH		TYPICAL				
HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: OK: REPLACE: COMMENTS: REPLACE: SIZE: BER PUMP MOTOR N/A: X OK: REPLACE: SIZE: BER PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE: BER INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE: S	CONVERTER TYPE:				i	
BOILER BURNER ATMOSPHERIC: POWER: OK: REPLACE: COMMENTS: BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE: BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR RINSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:	STM - Steam					
COMMENTS: BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE: BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: [ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: [ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: REPLACE: SIZE: COMMENTS:						
BLR PUMP MOTOR NA: X OK: REPLACE: SIZE: BLR PUMP SEALS NA: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION NA: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION NA: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP SEALS NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS NA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS NA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NA: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION NA: OK: REPLACE: SIZE: CV PUMP MOTOR NA: X OK: REPLACE: SIZ		ATMOSPI	HERIC:	POWER:	OK: REPLA	CE:
BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: MISSING: ESTIMATED QUANTITY:	COMMENTS:				Caraca Ca	
BUR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTO			***			
BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: MISSING: ESTIMATED QUANTITY:						
BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: MISSING: ESTIMATED QUANTITY:	RI D DI IMD MOTOD	ΊΝ/Δ∵ Υ	IOK.	REPLACE:	ISIZE:	
COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK:		II .	1		l .	
BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE:		<u> </u>		1		
PIPE INSULATION	OURINETTO.					
PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:						
PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: COMMENTS: WHOMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: <td>BLR INSULATION</td> <td>N/A: X</td> <td>OK:</td> <td>MISSING:</td> <td>ESTIMATED QUANTITY:</td> <td></td>	BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
COMMENTS: HW PUMP MOTOR HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SI		<u> </u>		MISSING:	ESTIMATED QUANTITY:	
HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: S				1	•	
HW PUMP SEALS			···	****		
HW PUMP SEALS				***		
HW PUMP MOTOR	HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	HW PUMP MOTOR	N/A: X	OK:	REPLACE:		
HW PUMP SEALS	HW PUMP SEALS	N/A: X	OK:			
HW PUMP MOTOR	HW PUMP MOTOR	H				
HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:	HW PUMP SEALS	N/A: X	OK:	REPLACE:		
COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: COMMENTS:						
CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:	HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:	COMMENTS:					
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:						
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:						
COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:						
CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:		JN/A: X	JOK:	REPLACE:	SIZE:	
	COMMENTS:					
		76.74	Tour W	THEODIS	IECTIMATED CHANTITY	
IOV DIDE INOLE INTA IOV INTEGRACE V JESTIMATED AHABITY 30' (6) 2.1/2"						001 (0.0.4/0)
COMMENTS:	CV PIPE INSUL.	N/A:	OK:	MISSING: X	ESTIMATED QUANTITY:	30' @ 2-1/2"

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

7245

FILE:

	BOILE	R & CON	/ERTER -	HVAC UI	PGRADE (DBSERVATIO	NS
BOILER/CONVERTER NO		CV-3	LOCATION (RM)	MEZZANINE		titikai kanaksa et erakista muure araatka pakka 1941 ilikuuna ee oraa oo m
BOILER TYPE:			MFG.:	OLD DOMI	NON	MODEL:	
CONVERTER TYPE:		STM/HW	MFG.:			MODEL:	
STM - Steam		Steam to Hot				- High Temp HW to	
HW - Hot Water			HW to HW Cv.			estic Hot Water Con	
BOILER BURNER	ATMOSPH		POWER:		OK:	REPL	ACE:
COMMENTS:	6" DIA X 3	', TEMP @ 162	2 DEGREES F				
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:		
BLR PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:		
COMMENTS:							
	*****		***************************************				
DI DI MICHIATION	MALIA.	Tox	INICONO		TEOTULATES	CHANTITY	
BLR INSULATION	N/A:	OK:	MISSING:			QUANTITY:	
PIPE INSULATION	N/A:	OK:	MISSING:		JESTIMATED	QUANTITY:	
COMMENTS:							
HW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:		
HW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:		
COMMENTS:							,

CV PUMP MOTOR	N/A: X	JOK:	REPLACE:		SIZE:		
CV PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:		
COMMENTS:	<u> </u>	10	1.10.0100.		12,55		
OUNIVILIA 10.							
CV INSULATION	N/A:	OK:	MISSING:	X	ESTIMATED	QUANTITY:	
	N/A:	OK:	MISSING:	Χ	ESTIMATED	OLIANTITY	10' @ 2-1/2"
CV PIPE INSUL.	IIIN/∧.	ĮOK.	1	, ,		GC/IIIIII.	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7606

BLDG NAME: ENL PERS DIN

ELECTRIC METER: N

CONDITIONED SQFT:

13,493

GAS METER: Y
SUSPECT ACM: Y

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

23

TUE: WED: THUR: FRI: SAT: MON: SUN: 0 0 PRES START: 0 0 0 0 24 24 24 24 24 PRES STOP: 24 24 6 5 6 5 5 5 REQ START: 24 24 24. 24 24 REQ STOP: 24

REMARKS:

SUSPECT ACM LOCATED ON PIPE FITTINGS AND BOILER FLUE

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

В		NUMBER					A11111	0047101	L ME3				_	
		NUMBE						OCATION						
REFRIG	SYS#S	RVNG A	HU: CH	1-1	% (F BLD	SERVES AREA H	S AREA: EATED:	DINNI	VG		25		
AHU U	NIT TYPE	SING	LE ZONE					NU	JMBER (OF ZON	ES IF MZ	UNIT:	0	
1	Ci	FM-HTG:			7,000		CF	M-CLG:			7,000			
	M	IN %OA:	<u></u>		30		MA	X %OA:			100			
NAMEP	LATE													
	UN	IIT MFG:						UN	IT MODE	≣L:				
\$	SUPPLY	FAN HP:			3			RET/EX	H FAN F	łP:		0		
		TR MFG:						XH FAN						
SUPPLY F		MODEL: IMENTS:	6-3327	95			RET/EXH	I FAN MT	R MODE	EL:				
COILS	00													
	Coil			Coil Type	9		Мо	dulating	Valve?					_
	PREHEA	AT COIL:	NONE	• • •										
	HEATIN	IG COIL:		Л										
		AT COIL:	,											
		IIDIFIER: IG COIL:												
SCHED														
	CHEDUL	F NO:	23						MONT	LH SCHI	EDULE N	n		
SCHEDUL		;							MOIN		LOCEL IN	O		
		SUN:	MON:	TUE:	WE	D· TH	UR:	FRI:	SAT:					
PRES ST	TART:	0	0	0		0	0	0 -	0					
PRES S	STOP:	24	24	24		24	24	24	24				1	
REQ ST	=	6	5	5		5	5	5	6					
REQ S	STOP:	24	24	24	-	24	24	24	24					
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	:	
		\boxtimes			\boxtimes		\boxtimes	\boxtimes	\boxtimes	\boxtimes		\boxtimes		
CONTR	<u>OLS</u>													
	TYPE	OF CONT	ROLS:	PNEUM	ATIC				OSTAT		SINGLE	SETPOIN		
		IP WINT				0			DECK I				0	
PRESEN	T TEMP	WINTR U	NOCC:			0.			ED AIR D				0	
		EMP SUI P SUM U				0		R SETPO IER SETI					0	
MIN OA	DMPR C	ONTROL	_: N	MIX	ED AIF	RDMPR	CONTRO	L: N	IMPLE	MENT	DEMAND	LIMIT CN	TRI S?	N
		ONTROL	<u> </u>				CONTRO	=					CLOCK:	=
		ONTRO	===	ECC	NOMIZ	ZER WB	CONTRO	L: N		TIME	CLOCK (_
EXH AIR	DMPR C	ONTROL	_: N											
		TROLS D												

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW

				···	
	DOILDING 110	7606 AHU-2	AHU LOCATION	: MEZZ	
			SERVES AREA:	DINNING	
	REFRIG SYS # SRVNG AHU:		SAREA HEATED:	DININING	25
	AHU UNIT TYPE SINGLE Z	ONE	NU	MBER OF ZONES	F MZ UNIT: 0
	CFM-HTG:	7,250	CFM-CLG:	7,2	50
	MIN %OA:	30	MAX %OA:	1	00
١	NAMEPLATE				
	UNIT MFG:		UNI	T MODEL:	
	SUPPLY FAN HP:	3		H FAN HP:	0
		ARATHON	RET/EXH FAN		,
	SUPPLY FAN MTR MODEL:		RET/EXH FAN MT	R MODEL:	
	COILS				
	Coil	Coil Type	Modulating	Valve?	
	PREHEAT COIL: S	TEAM			
	HEATING COIL: S	TEAM			
	REHEAT COIL: N	ONE	<u> </u>		
		ONE			
	COOLING COIL: C	<u>W</u>	\boxtimes		
٤	SCHEDULE				
	DAY SCHEDULE NO:	23		MONTH SCHEDU	JLE NO: 3
	SCHEDULE COMMENTS:				
	SUN: M	ON: TUE: WED: TH	IUR: FRI:	SAT:	
	PRES START: 0	0 0 0	0 0	0	
	PRES STOP: 24	24 24 24 ==	24 24	24	
	REQ START: 6	$\frac{5}{24} = \frac{5}{24} = \frac{5}{24} =$	$\frac{5}{24} = \frac{5}{24} =$	<u>6</u> 24	
	REQ STOP:24	24 24 24	24 24		
	MONTHS JAN: FEB: MA	R: APR: MAY: JUN:	JUL: AUG:	SEP: OCT: 1	IOV: DEC:
	ON:		\boxtimes		
(CONTROLS				
	TYPE OF CONTRO	DLS: PNEUMATIC		<u> </u>	NGLE SETPOINT
	PRESENT TEMP WINTR O	OCC: 0		DECK DEG F:	0
	PRESENT TEMP WINTR UNC	OCC: 0		ED AIR DEG F:	0
	PRESENT TEMP SUM C	OCC: 0	OTHER SETPO	OINT DESCRIP:	
	PRESENT TEMP SUM UNC	OCC: 0	OTHER SET	POINT DEG F:	0
	MIN OA DMPR CONTROL:	N MIXED AIR DMPF	CONTROL: N	IMPLEMENT DE	MAND LIMIT CNTRLS? N
	MAX OA DMPR CONTROL:	Y ECONOMIZER DE			TIME CLOCK: N
	RET AIR DMPR CONTROL:	Y ECONOMIZER WE	CONTROL: N	TIME CL	OCK OPERATIONAL? N
	EXH AIR DMPR CONTROL:	N			
	OTHER CONTROLS DES	SCR:			
	CONTROLS COMME	<u> </u>			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER: 7606 AHU NUMBER: HV-1	AHU LOCATION: MEZZ	
REFRIG SYS # SRVNG AHU:	SERVES AREA: KITCHEN	
	% OF BLDG AREA HEATED:	25
AHU UNIT TYPE HEATING AND VENT	TILATING NUMBER OF ZONES IF MZ UNIT	т: 0
	11,400 CFM-CLG : 0	
MIN %OA:	100 MAX %OA: 100	
NAMEPLATE		
UNIT MFG:	UNIT MODEL:	
SUPPLY FAN HP:	5 RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG: MARATHON	RET/EXH FAN MTR MFG:	T 400 de.
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:	MATERIAL PROPERTY OF THE PROPE
COMMENTS:		THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON A
COILS		
Coil Coil Ty	ype Modulating Valve?	
PREHEAT COIL: NONE		
HEATING COIL: STEAM		
REHEAT COIL: NONE		
	_	
HUMIDIFIER: NONE	 	
COOLING COIL: NONE	Ц	
SCHEDULE	And the second s	
DAY SCHEDULE NO: 23	MONTH SCHEDULE NO:	1
SCHEDULE COMMENTS:		
SUN: MON: TUE	E: WED: THUR: FRI: SAT:	
PRES START: 0 0	0 0 0 0	
	24 24 24 24 24	
		1
REQ STOP: 24 24 2	24 24 24 24	1
MONTHS JAN: FEB: MAR: APR:	MAY: JUN: JUL: AUG: SEP: OCT: NOV: DE	C:
ON:		3
CONTROLS		
TYPE OF CONTROLS: PNEU	MATIC THERMOSTAT TYPE: SINGLE SET	POINT
PRESENT TEMP WINTR OCC:	0 HOT DECK DEG F:	0
PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F:	0
DDESENT TEMP SUM OCC.	MIXED AIR DEG F:	0
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL: N MI	IIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT	E CNITRI CO TO
		-
		ME CLOCK: N
	CONOMIZER WB CONTROL: N TIME CLOCK OPER	RATIONAL? N
EXH AIR DMPR CONTROL: N		
OTHER CONTROLS DESCR:		
CONTROL & COMMENTS		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

LLATION **EMC NO:** 1406-001 **DATE:** 10/11/94

PREPARED BY: AJN/CWW

		· · · · · · · · · · · · · · · · · · ·	
BUILDING NUMBER			
AHU NUMBER	: <u>HV-2</u>	AHU LOCATION: MEZZ	
REFRIG SYS # SRVNG AH		SERVES AREA: KITCHEN	0
	% OF BLDG	S AREA HEATED:	8
AHU UNIT TYPE HEATIN	NG AND VENTILATING	NUMBER OF ZO	NES IF MZ UNIT: 0
CFM-HTG:	3,600	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SUPPLY FAN HP:	1.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: COMMENTS:		RET/EXH FAN MTR MODEL:	And the second s
COILS		-	
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:			
REHEAT COIL: HUMIDIFIER:	NONE	—: H	
COOLING COIL:	NONE	<u>-</u>	
SCHEDULE			
		MONTHO	LIEDIU E NO
DAY SCHEDULE NO: SCHEDULE COMMENTS:	23	MONTH SC	HEDULE NO: 1
SUN:		IUR: FRI: SAT:	
PRES START: 0 PRES STOP: 24	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24 24 24	
REQ START: 6	$\frac{27}{5}$ $\frac{27}{5}$ $\frac{27}{5}$ $=$	5 5 6	
REQ STOP: 24	24 24 24	24 24 24	1
MONTHS JAN: FEB: I	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OC	
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT TYPE	
PRESENT TEMP WINTE	ROCC: 0	COLD DECK DEG F	
PRESENT TEMP WINTR U	NOCC: 0	MIXED AIR DEG F	
PRESENT TEMP SUN	A OCC: 0	OTHER SETPOINT DESCRIP):
PRESENT TEMP SUM U	NOCC: 0	OTHER SETPOINT DEG F	: 0
MIN OA DMPR CONTROL	.: N MIXED AIR DMPR	CONTROL: N IMPLEMEN	T DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL			TIME CLOCK: N
RET AIR DMPR CONTROL		CONTROL: N TI	ME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL	.: N		
OTHER CONTROLS D	ESCR:		
CONTROLS COMM	IENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER: 7606	BOILER RM LOCATION: MER
BOILER UNIT	
SOURCE OF BLDG HEAT BLR/CONVERTE	R SERVES AREA OR SERVICE: SPACE HEAT & DHW
BOILER BOILER TAG: BLR-1 BOILER TYPE: MED PRESS STEAM (15# TO 125 FUEL TYPE: NAT. GAS	CONVERTER CONVERTER TAG: #) CONVERTER TYPE: CONV HT SOURCE:
CENTRAL PLANT DIRECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION: 17
BOILER MFG: PAWNEE UNIT MODEL: A-250 COMMENTS: SCHEDULE	BLR CAP OUTPUT (BTUH): 6,900,000 BLR CAP INPUT (BTUH): 8,625,000
DAYS SCHEDULE NO: 10 SCHEDULE COMMENTS:	MONTH SECHDULE NO: 3
PRES STOP: 24 24 24 24	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
MONTHS JAN: FEB: MAR: APR: MAY: ON:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	
TYPE OF BURNER CONTROLS:	RESET CONTROLS: N DEG F or PSIG
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE**: 10/11/94

CLIENT CONTRACT NO: DACA 01-94-D-0033

PREPARED BY: AJN/CWW LOCATION: FT. RILEY, KS

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N	JMBER: 7	7606			E	BOILER RM	LOCA	TION:	MEZZ		
BOILER UI	NIT										
			BLR/CONV	ERTER SEF	RVES ARE	A OR SER\	/ICE:	BB RAD	IATION		
SOURCE OF	BLDG HEA	·T									
● □ BOIL	.ER				: 🖂 cc	ONVERTER					
	ER TAG:				. —	VERTER TA	\G : <u>C</u>	V-1			
BOILEI	R TYPE:				CONV	ERTER TYP	PE: S	тм то нт	HW		
FUE	L TYPE:				CONV	HT SOUR	CE:				
CENTRA	L PLANT D	IRECT									:
IAMEPLA	TE			%	AREA HE	ATED BY B	B RAD	IATION:			17
BOILER MFG:	DUNHAM I	BUSH		-	BLR C/	AP OUTPUT	(BTU	- 1):		C)
UNIT MODEL:				=	BLR	CAP INPUT	(BTUF	H):		(<u>)</u>
COMMENTS:											
COMINEM 12:	1										
CHEDUL	E			<u> </u>							
DAYS SCHEDU	JLE NO:	23				N	NONTH	SECHD	ULE NO:		1
SCHEDULE COM	MENTS:										
	SUN:	MON:	TUE:	WED: T	HUR:	FRI: S	AT:				 .
PRES START		0	0	0	0	0	0				i
PRES STOP		24	24	24	24	24	24				:
REQ START	: 6	5	5	5	5	5	6				:
REQ STOP	: 24	24	24	24	24	24	24				<u>:</u>
MONTHS JAN	l: FEB:	MAR:	APR: M	IAY: JUN:	: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	\boxtimes	\boxtimes						\boxtimes			
CONTROL	.s										
TYPE O	F BLR CON	TROLS:	PNEUMA	TIC			RESET	CONTE	ROLS: [N	
OPEI	RATING SE	TPOINT:		0 DEG I	F or PSIG						
TYPE OF BU	IRNER CON	ITROLS:									
CONT	ROLS COM	IMENTS:									
HW PUMP											
PUMP TAG	: 1	j	PUMP	HP:	0.7	5 PU	MP MF	G: BAI	DOR		
PUMP SERVICE	: HW PUN	/IP				PUMP	MODE	EL:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94 PREPARED BY: AJN/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7606	BLDG NAME: E	NL PERS DIN	OBSERVATIONS
REF. UNIT NUMBER/TAG: CH-1		LOCATION (ME	ER#): MER
			VED: AHU-1, 2
UNIT TYPE RECIPE	ROCATING WITH AIR CO	OLED CONDENSING	UNIT
NAMEPLATE			
CHILLER MFG: TSI		TOWER MFG:	TSI
CHILLER MODEL: SC2CD70	# C	OF TOWER FANS:	6
CHILLER SERIAL NO: 9225-5	NAME OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OWNER OF THE OWNER OWNE	TOWER FAN V:	208
CHILLER V:	208 TO	WER FAN AMPS:	0
CHILLER AMPS:	135	TOWER FAN HP:	1
CHILLER PH:	3		
CHILLER CAP (TONS):	70		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE NO:	23	MONTHS SCHEDUL	E NO: 2
SCHEDULE COMMENTS:			American Control of the Control of t
	UE: WED: THUR:	FRI: SAT:	
PRES START: 0 0	0 0 0	0 0	1
PRES STOP: 24 24	24 24 24	24 24	1
REQ START: 6 5	5 5 5	5 6	;
REQ STOP: 24 24	24 24 24	24 24	
MONTHS JAN: FEB: MAR: APR	: MAY: JUN: JU	L: AUG: SEP:	OCT: NOV: DEC:
ON:			<u></u>
CONTROLS			
TYPE OF CONTROLS: ELECTR	RIC.		
CWS SETPOINT:	0	CNWS SETPOINT:	0
CWR SETPOINT:	0	CNWR SETPOINT:	0
PRESS LITE HI: N	TEMP LITE HI:	OTHER INDI	CATIORS:
PRESS LITE LOW: N	TEMP LITE LOW:	V V	
PRESS GAUGES: N	TEMP GAUGES:	V	
CONTROLS COMMENTS:			
CW and CNW PUMPS			
	P HP: 5	PUMP MFG:	CENTURY
PUMP SERVICE: CW PUMP (Chilled Water)		PUMP MODEL:	SC-215-FMA
Time Services (Office Valle)		FORM MICDEL.	00-210-1 WIA

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7606

FILE:

NHU NO.:	AHU-1	LOCATIO	G UNIT - HVAC				11.07.07
AHU TYPE:	Anu-I	MFG.:	it (ixiii) Sori	<u>-</u> 1	MODEL:		
SZ - Single Zone	⊔2\/ Lic	eating & Vntltng	FC - F	an Coil (Indicate		4P for 4 Pir	ne)
SZ - Single Zone MZ - Mulitzone		riable Air Vol.		Reheat System	21 101 21 1pc 01	71 101 7 1	50)
MZ - Mullizone DD - Dual Duct	UH - Unit		· ·	Induction System			
O.A. DAMPER	N/A:	OK:	IREPLACE:	SIZE:	DPR-ACT	OK:	IRP- ACT:
D.A. DAMPER R.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP-ACT:
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
COMMENTS:	11	1	U'S IN MEZZANINE.				DPR-ACT = Damper Actuator
JOIVIIVIEN 13.			LS SITTING OUT, NOT	CONNECTED Y	FT		RP-ACT = Replace Actuator
	INE VV CC	MINOLIANE	<u> </u>	T CONTINED !			THE FIGURE FIELD AND ADDRESS OF THE PARTY OF
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:		1	IS SAME AS OTHER [ΊΤΗ (1) ΜΔΙΙΔΝ	ID (1) AHU	
OUMINENTO:	ON EAC		IO SAIVIL AS UTITER L	DIMINO FIALLO W	TITI (I) INAO AI	D (1) A110	
SUPPLY AIR FAN	ON EAC		FAN BEARINGS:	COMMEN	JTS:		
SUPPLY FAN MOTOR	OK:	IREPLACE		COMMEN			
		IOK:	ICOMMENTS:	COMMEN	(10.		
INLET VANES	N/A:		FAN BEARINGS:	COMMEN	ITC.	·	
RETURN AIR FAN	OK:						
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		TEDICTOR	DACE TANKS
RETURN FAN MOTOR COMMENTS:	11		: AME AS WELL WITH L			TER/STOR	RAGE TANKS
	11					TER/STOR	RAGE TANKS
COMMENTS:	CONVER	RTERS THE SA	AME AS WELL WITH L	ARGE ASBESTO	S HW CONVER		
COMMENTS:	CONVER	OK:	AME AS WELL WITH L	ARGE ASBESTO	S HW CONVER	OK:	RP- ACT: RP-BD:
COMMENTS: COOLING COIL HEATING COIL	CONVER N/A: N/A:	OK:	REPLACE:	ARGE ASBESTO SIZE: SIZE:	S HW CONVER CNTLVLV CNTLVLV	OK:	RP- ACT: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK:	RP- ACT: RP-BD: RP- ACT: RP-BD: RP- ACT: RP-BD: RP- ACT: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A: N/A: N/A: AHU-1 H	OK: OK: OK: OK: OK: AS A LEAKY 3	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: CHILLED WATE	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: N/A: AHU-1 H	OK: OK: OK: OK: OK: AS A LEAKY 3	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: CHILLED WATE	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK:	RP- ACT: RP-BD: RP- ACT: RP-BD: RP- ACT: RP-BD: RP- ACT: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: N/A: AHU-1 H	OK: OK: OK: OK: OK: AS A LEAKY 3	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: CHILLED WATE	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A: N/A: AHU-1 H AHU-2 C	OK: OK: OK: OK: OK: OK: HAS A LEAKY 3	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: B-WAY VALVE ON THE	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: AHU-1 H AHU-2 C	OK: OK: OK: OK: OK: OK: OK: IAS A LEAKY 3: HILLED WATE	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: B-WAY VALVE ON THE	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A: AHU-1 H AHU-2 C	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A: AHU-1 H AHU-2 C	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: B-WAY VALVE ON THE	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A: AHU-1 H AHU-2 C	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: AHU-1 H AHU-2 C	OK: OK: OK: OK: OK: AS A LEAKY 3: CHILLED WATE	REPLACE: REPLACE: REPLACE: REPLACE: B-WAY VALVE ON THE REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE.	OK: OK: OK: OK:	RP- ACT:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: AHU-1 H AHU-2 C	OK: OK: OK: OK: OK: AS A LEAKY 3 CHILLED WATE OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: S-WAY VALVE ON THE REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: MISSING:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE. LACE @ 2".	ОК: ОК: ОК: ОК:	RP- ACT:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: AHU-1 H AHU-2 C N/A: N/A: N/A: N/A: NEEDS	OK: OK: OK: OK: OK: AS A LEAKY 3: CHILLED WATE OK: OK: OK: OK: OK: OK: OK: OK: OK: OK	REPLACE: REPLACE: REPLACE: REPLACE: B-WAY VALVE ON THE REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLV R @ 2" VALVE. LACE @ 2".	ОК: ОК: ОК: ОК:	RP- ACT:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7606

FILE:

	REFRIGI	RATION E	QUIPMEN	NT - HVAC UPGRADE OBSERVATIONS
CHILLER / EQUIP. NO.		CH-1	LOCATION (RM) MER/OUTSIDE
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	TSI MODEL: SC2CD70/TAC-73
C-WCT = Centrifugal w/	Water Side C	Cooling Tower	<u> </u>	R-ACCU = Reciprocating w/ Air Cooled Condensing Unit
R-WCT = Reciprocating	w/ Water Sid	e Cooling Towe	r .	ASB-WCT = Absorption w/ Water Side Cooling Tower
ACCU = Air Cooled Cond	densing Unit			CT = Cooling Tower
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:	TYPICAL	OF 6 CONDEN	SER FANS	
COOLING TOWER	N/A:	IOK:	REPLACE:	
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:
COMMENTS:	11771.	JON. X	INCI DAGE.	OIZE.
COMMENTS.				
CHILLER INSUL.	N/A:	OK: X	MISSING:	JESTIMATED QUANTITY:
CHW PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:		1014.	WIIOONYO.	LOTIMATED GOANTIT.
COMMENTS:				

CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	ОК:	REPLACE:	SIZE:
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:			1,75, 5705.	JOIAL.
JOIVIIVILIY 13.				
	····		····	******

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

7606 FILE:

	BOILE	R & CON	VERTER - HVAC	UPGRADE OBSERVATIONS	
BOILER/CONVERTER NO).	BLR-1	LOCATION (RM)	MER	
BOILER TYPE:		STM	MFG.: PAWNE		
CONVERTER TYPE:			MFG.:	MODEL:	
STM - Steam			ot Water Conv.	HTHW/STM - High Temp HW to Steam Convertor	
HW - Hot Water			p. HW to HW Cv.	DHW - Domestic Hot Water Convertor	
BOILER BURNER	ATMOSPI		POWER: X	OK: X REPLACE:	
COMMENTS:	BOILER S	HELL RUST	ED, ASBESTOS ON FLU		
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	···
COMMENTS:				and the second s	
					
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:	PIPE INSI	JLATION PE	ALING		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
CV INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
CV PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7654 BLDG NAME: ENL PERS DIN

ELECTRIC METER: N CONDITIONED SQFT:

GAS METER: N
SUSPECT ACM: Y

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 23

THUR: SUN: MON: TUE: WED: FRI: SAT: 0 0 0 0 PRES START: 0 24 24 24 24 24 24 24 PRES STOP: ______ 5 6 5 5 5 5 REQ START: 24 24 24 24 24 24 24 REQ STOP:

REMARKS:

SUSPECT ACM LOCATED ON BOILER FLUE AND PIPE FITTINGS.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

BUILDING NUMBER: 7654

DATE: 10/10/94 PREPARED BY: AJN

AHU NUMBER	R: AHU-1	AHU LOCA	TION: MEZZ		
REFRIG SYS # SRVNG AI	HU: CH-1	SERVES AR	EA: DINNING		
		% OF BLDG AREA HEAT	ED:	25	
AHU UNIT TYPE SINGL	LE ZONE		NUMBER OF ZONE	ES IF MZ UNIT:	0
CFM-HTG:	7,0	000 CFM-C	LG:	7,000	
MIN %OA:		30 MAX %	DA:	100	
NAMEPLATE					
UNIT MFG:	DUNHAM/BUSH		UNIT MODEL: HA	H-80	
SUPPLY FAN HP:		5 RET	TEXH FAN HP:	0	
SUPPLY FAN MTR MFG:		THE SHAPE OF THE S	AN MTR MFG:		
SUPPLY FAN MTR MODEL: COMMENTS:	6-322465-01	RET/EXH FAN	MTR MODEL:		
COILS					
Coil	Coil Type	Modula	ting Valve?		
PREHEAT COIL:	STEAM				
HEATING COIL:					
REHEAT COIL:	NONE				
HUMIDIFIER:					
COOLING COIL:	CW	\boxtimes			
SCHEDULE					
DAY SCHEDULE NO: SCHEDULE COMMENTS:	23		MONTH SCHE	EDULE NO:	3
DAY SCHEDULE NO:	23 MON: TUE:	WED: THUR: FRI:	MONTH SCHE	EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0		WED: THUR: FRI:		EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE: 0 0 24 24		SAT:	EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 6	MON: TUE: 0 0 24 24 5 5	0 0 0 24 24 24 5 5 5	SAT: 0 24 6	EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE: 0 0 24 24	0 0 0 24 24 24	SAT: 0 24	EDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB:	MON: TUE: 0 0 24 24 5 5 24 24	0 0 0 24 24 24 5 5 5	SAT: 0 24 6 24	NOV: DEC:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 6 REQ STOP: 24	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M	0 0 0 24 24 24 5 5 5 24 24 24	SAT: 0 24 6 24 G: SEP: OCT:		3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON:	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M	0 0 0 24 24 24 5 5 5 24 24 24 AY: JUN: JUL: AU	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON:	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M ⊠ ⊠	0 0 0 24 24 24 5 5 5 24 24 24 AY: JUN: JUL: AU	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: OPRES STOP: 24 REQ START: REQ STOP: 24 MONTHS JAN: FEB: ON:	MON: TUE:	0 0 0 0 0 24 24 24 24 24 24 24 24 24 24 24 24 24	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ S	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M ☑ ☑	0 0 0 24 24 24 5 5 5 24 24 24 IAY: JUN: JUL: AU □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ START: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE U	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M	0 0 0 0 0 24 24 24 24 24 24 24 24 24 24 24 24 24	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ STOP: PREQ STOP: PRES STOP: PRES STOP: PRES STOP: PRESENT TEMP WINTE	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M	0 0 0 24 24 24 5 5 5 24 24 24 IAY: JUN: JUL: AU □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0	3
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON: X CONTROLS TYPE OF CONT PRESENT TEMP WINTE U PRESENT TEMP SUI	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M	0 0 0 0 0 24 24 24 24 24 24 24 24 24 24 24 24 24	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0	
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ START: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM U	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M MCC: PNEUMA R OCC: INOCC: INOCC: MOCC: INOCC: MINOCC: INOCC: MINOCC: INOCC: MINOCC: INOCC: MINOCC: MINOCC:	0 0 0 24 24 24 5 5 5 24 24 24 AY: JUN: JUL: AU	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0	RLS? N
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTI PRESENT TEMP WINTE U PRESENT TEMP SUM U MIN OA DMPR CONTROL	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M	0 0 0 24 24 24 5 5 5 24 24 24 IAY: JUN: JUL: AU □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0	RLS? N
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ STOP: MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTI PRESENT TEMP WINTR U PRESENT TEMP SUI PRESENT TEMP SUM MIN OA DMPR CONTROL MAX OA DMPR CONTROL	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: N	0 0 0 24 24 24 5 5 5 24 24 24 IAY: JUN: JUL: AU	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0 0 DEMAND LIMIT CNTI	RLS? N
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: OPRES STOP: PRES STOP: PREQ STOP: ON: ON: ON: ON: ON: ON: ON: ON: ON: ON	MON: TUE: 0 0 24 24 5 5 24 24 MAR: APR: M MOCS: PNEUMA R OCC: INOCC: INOCC: INOCC: L: N MIXE L: Y ECON L: N ECON	0 0 0 24 24 24 5 5 5 24 24 24 IAY: JUN: JUL: AU	SAT: 0 24 6 24 G: SEP: OCT:	NOV: DEC: SINGLE SETPOINT 0 0 0 0 DEMAND LIMIT CNTI	RLS? N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN

Allxila	MIDERIO CITI CO	INTE I ODGERNATIO	0110
BUILDING NUMBER:	7654		
AHU NUMBER:	AHU-2	AHU LOCATION: MEZZ	
REFRIG SYS # SRVNG AH	J: CH-1	SERVES AREA: DINNING	
	% OF BLDG	AREA HEATED:	25
AHU UNIT TYPE SINGLE	ZONE	NUMBER OF ZON	ES IF MZ UNIT: 0
CFM-HTG:	7,250	CFM-CLG:	7,250
MIN %OA:	30	MAX %OA:	100
NAMEPLATE			
	DUNHAM/BUSH	UNIT MODEL: HA	.H-80
SUPPLY FAN HP:	5	RET/EXH FAN HP:	0
	BALDOR	RET/EXH FAN MTR MFG:	MARTIN 1. 18 19 19 19 19 19 19 19 19 19 19 19 19 19
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	AAA.W.
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
• • • • • • • • • • • • • • • • • • • •	STEAM		
HEATING COIL:	STEAM		
***************************************	NONE	_ 片	
	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	23	MONTH SCH	EDULE NO: 3
SCHEDULE COMMENTS:		·	
SUN:	MON: TUE: WED: THE	UR: FRI: SAT:	:
PRES START: 0	0 0 0	0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START:6	5 5 5	5 6	
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB: N	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTR	ROLS: PNEUMATIC	THERMOSTAT TYPE:	SINGLE SETPOINT
PRESENT TEMP WINTR	OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR UN		COLD DECK DEG F: MIXED AIR DEG F:	0
PRESENT TEMP SUM	OCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM UN	NOCC: 60	OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	: N MIXED AIR DMPR	CONTROL: Y IMPLEMENT	DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL		CONTROL: N	TIME CLOCK:
RET AIR DMPR CONTROL	ECONOMIZER WB	CONTROL: N TIME	CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL	: N		
OTHER CONTROLS D	ESCR:		
CONTROLS COMM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/10/94 PREPARED BY: AJN

	TO CHILL OBOLITY ATTOMO
BUILDING NUMBER: 7654	
AHU NUMBER: HV-1	AHU LOCATION: MEZZ
DEEDIC CVC # CDVAIC AUIII	
REFRIG SYS # SRVNG AHU:	SERVES AREA: KITCHEN
	% OF BLDG AREA HEATED: 25
AHU UNIT TYPE HEATING AND VE	NTILATING NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	11,400 CFM-CLG : 0
MIN %OA:	100 MAX %OA: 100
NAMEPLATE	
UNIT MFG: DUNHAM/	BUSH UNIT MODEL: HAH-80
SUPPLY FAN HP:	5 RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: MARATHO	
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	THE PARTY PARTY HOUSE.
COILS	
Coil Coil	I Type Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: STEAM	L
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	
COOLING COIL. NOIVE	
SCHEDULE	
DAY SCHEDULE NO: 23	MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:	
SUN: MON:	TUE: WED: THUR: FRI: SAT:
PRES START: 0 0	
PRES STOP: 24 24	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
REQ START: 6 5	
REQ STOP: 24 24	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
NEGOTOT: 24 24	24 24 24 24
MONTHS JAN: FEB: MAR: API	R: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF CONTROLS: PN	EUMATIC THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F: 0
PRESENT TEMP SUM OCC:	MIXED AIR DEG F: 0
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: Y	ECONOMIZER DB CONTROL: N TIME CLOCK: N
RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94
PREPARED BY: AJN

BUILDING NUMBER			A DOVE CEIL	INC KITCHEN	
AHU NUMBEI	R: <u>HV-2</u>	AHU LOCATION	I: ABOVE CEIL	ING KITCHEN	
REFRIG SYS # SRVNG A		SERVES AREA:	KITCHEN		_
	% OF	BLDG AREA HEATED:			8
AHU UNIT TYPE HEAT	ING AND VENTILATING	NL	JMBER OF ZON	ES IF MZ UNIT:	
CFM-HTG:	3,600	CFM-CLG:		0	
MIN %OA:	100	MAX %OA:		100	
NAMEPLATE					
UNIT MFG:	DUNHAM/BUSH	UN	IT MODEL: HA	H-32	
SUPPLY FAN HP:		RET/EX	H FAN HP:	0	
SUPPLY FAN MTR MFG:		RET/EXH FAN	MTR MFG:		
SUPPLY FAN MTR MODEL:	- 0.100	RET/EXH FAN MT	R MODEL:		
COMMENTS:					
COILS					
Coil	Coil Type	Modulating	Valve?		
PREHEAT COIL:	NONE				
HEATING COIL:	STEAM				
REHEAT COIL:	NONE				
HUMIDIFIER:	: NONE				
COOLING COIL:	: NONE				
SCHEDULE					
	- 22		MONTH SCH	EDULE NO:	1
DAY SCHEDULE NO: SCHEDULE COMMENTS:	23		IIION III OOII		 ;
SCHEDULE COMMENTS.					
SUN:	MON: TUE: WED:		SAT:		:
PRES START: 0	0 0 0		0		
PRES STOP: 24	24 24 24		24		
REQ START: 6	5 5 5		6		\$ •
REQ STOP: 24	24 24 24	24 24	24		
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT:	NOV: DEC	:
ON:					:
CONTROLS				OINOLE CETTO	
TYPE OF CON	ITROLS: PNEUMATIC		MOSTAT TYPE: T DECK DEG F:	SINGLE SETPO	0.
PRESENT TEMP WINT	FR OCC:	U,	DECK DEG F:		0
PRESENT TEMP WINTR	UNOCC:	0	ED AIR DEG F:		0
PRESENT TEMP SU	IM OCC:		DINT DESCRIP:		
PRESENT TEMP SUM			POINT DEG F:		0.
MIN OA DMPR CONTRO	DL: N MIXED AIR I	DMPR CONTROL: N	IMPLEMENT	DEMAND LIMIT	CNTRLS?
MAX OA DMPR CONTRO		ER DB CONTROL: N]	TIM	E CLOCK: N
RET AIR DMPR CONTRO		R WB CONTROL: N] TIME	CLOCK OPERA	ATIONAL? 🔼
EXH AIR DMPR CONTRO			-		
OTHER CONTROLS	DESCR:				
CONTROLS COM	IMENTS:				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94

PREPARED BY: AJN

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N BOILER U		7654					BOILER	RMLOC	ATION:	MER		
— SOURCE OF		EAT	BLR/CO	NVERT	ER SER	VES AR	EA OR S	SERVICE:	SPACE	E HEAT &	DHW	
BOILE	ER TAG: ER TYPE: EL TYPE:	BLR-1 MED PRES	S STEAM (15# TO 12	25#)	CON	ONVERTE VERTER V HT SC	R TAG:				
CENTRA	L PLANT	DIRECT							777770000 A BANG 1 4 5			
IAMEPLA	TE				% <i>A</i>	AREA HE	ATED B	Y BB RAI	DIATION	:		17
BOILER MFG: UNIT MODEL: COMMENTS:	PAWNEE A-250							PUT (BTU PUT (BTU			6,900,000 8,625,000	_
DAYS SCHEDU	ULE NO:	10						MONT	H SECHE	DULE NO	:	3
PRES START PRES STOP REQ START REQ STOP	: 24 : 0	24	TUE: 0 24 0 24		D: TH 0 24 0 24	IUR: 0 24 0 24	FRI: 0 24 0 24	SAT: 0 24 0 24				
MONTHS JAN ON:	: FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	ост: ⊠	NOV:	DEC:	
ONTROL	S			-					·			<u></u> ;
OPEF TYPE OF BU		ETPOINT: NTROLS:	PNEUM		DEG F	or PSIG		RESE	T CONTE	ROLS: [N	
CONT	ROLS CO	MMENTS:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94

PREPARED BY: AJN

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER: 7	7654		BOILER RM LO	CATION: MEZZ	
BOILER UNIT					
		VERTER SERVES AR	EA OR SERVICE	: BB RADIATION	
——SOURCE OF BLDG HEA	\1				
☐ BOILER			ONVERTER		
BOILER TAG:			NVERTER TAG:		
BOILER TYPE:			VERTER TYPE:	STM TO HTHW	<u> </u>
FUEL TYPE:		CON	IV HT SOURCE:		
CENTRAL PLANT D	IRECT				
NAMEPLATE		% AREA H	EATED BY BB R	ADIATION:	17
BOILER MFG:		BLR C	CAP OUTPUT (BI	тин):	0
UNIT MODEL:		BLF	R CAP INPUT (BT	TUH):	0
COMMENTS:					:
SCHEDULE					
DAYS SCHEDULE NO:	23		MON	TH SECHDULE NO:	1
SCHEDULE COMMENTS:					:
SUN:	MON: TUE:	WED: THUR:	FRI: SAT:		
PRES START: 0	0 0	0 0	0 0		
PRES STOP: 24	2424	24 24	24 24		
REQ START: 6	5	5 5			
REQ STOP: 24	24 24	24 24	24 24		
MONTHS JAN: FEB:	MAR: APR: M	MAY: JUN: JUL:	AUG: SEP	: OCT: NOV:	DEC:
ON: ☑ ☑					\boxtimes
CONTROLS					-
TYPE OF BLR COM	NTROLS: PNEUMA	ATIC	RES	SET CONTROLS:	N
OPERATING SE	TPOINT:	0 DEG F or PSIG	}	_	
TYPE OF BURNER COM	NTROLS:				
CONTROLS CON	MENTS:				
HW PUMP					
PUMP TAG: 1	PUMP	HP:	1.5 PUMP	MFG: U.S. ELECTI	RICAL
PLIMP SERVICE: HW PLIA	/P		PUMP MO	DEL:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94

PREPARED BY: AJN

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7654	BLDG	NAME: ENL PERS DIN	
REF. UNIT NUMBER/TAG	: CH-1	LOCATION (M	ER#): AHU-1, 2
		AHU'S SER	
UNIT	TYPE RECIPROCATING WI	TH AIR COOLED CONDENSING	GUNIT
NAMEPLATE			
CHILLER MFG:	TSI	TOWER MFG:	TSI
CHILLER MODEL:	SC2CD805	# OF TOWER FANS:	6
CHILLER SERIAL NO:	7995-4	TOWER FAN V:	208
CHILLER V:	208	TOWER FAN AMPS:	25
CHILLER AMPS:	135	TOWER FAN HP:	1
CHILLER PH:	3		
CHILLER CAP (TONS):	71		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE	NO: 23	MONTHS SCHEDUL	.E NO: 2
SCHEDULE COMMEN	NTS:		
SUN:	: MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	# *
REQ START: 6	5 5 5	5 5 6	
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB:	MAR: APR: MAY: J	IUN: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TVDE OF CONTE	OLS: ELECTRIC		
TYPE OF CONTR	OLS: ELECTRIC	1	
CWS SETP	OINT:	CNWS SETPOINT:	0
CWR SETP	OINT: (CNWR SETPOINT:	0
PRESS LI	TEHI: N TEMPL	ITE HI: N OTHER IND	ICATIORS:
PRESS LITE			TOTAL CONTRACTOR OF THE PROPERTY OF THE PROPER
PRESS GAL			
CONTROLS CO			
CW and CNW Pt			
CVV and CNVV P			
PUMP TAG: 1	PUMP HP:	5 PUMP MFG:	DAYTON
PUMP SERVICE: CW PUM	P (Chilled Water)	PUMP MODEL:	2N937-H

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

7654

FILE:

	AIR I	HANDLIN	G UNIT - HVAC	UPGRADE (OBSERVA	TIONS		
AHU NO.:	AHU-1	LOCATIO	V (Rm) MEZZ	ANINE				
AHU TYPE:	SZ	MFG.:	DUNHAM BUSH		MODEL:	HAH-80		
SZ - Single Zone	H&V - Hea	ating & Vntltng	The second secon	an Coil (Indicate :	2P for 2 Pipe or	4P for 4 Pipe	2)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit I	Heater	IND -	Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	1						DPR-ACT = Dampe	r Actuator
							RP-ACT = Replace	Actuator

FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
		-						
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
INLET VANES	N/A: X	OK:	COMMENTS:				*	
RETURN AIR FAN	IOK:	REPLACE	FAN BEARINGS:	ICOMMEN	ITS:	N/A		
RETURN AIR FAN RETURN FAN MOTOR	OK:		FAN BEARINGS:					
RETURN FAN MOTOR	OK: OK:	REPLACE REPLACE		COMMEN		N/A N/A		
RETURN FAN MOTOR								
RETURN FAN MOTOR								
RETURN FAN MOTOR COMMENTS:	OK:	REPLACE		COMMEN	ITS:		RP- ACT:X	RP-BD:)
RETURN FAN MOTOR COMMENTS: COOLING COIL	OK:					N/A	RP- ACT:X	RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	N/A: N/A:	OK: X	REPLACE:	COMMEN	CNTLVLV	N/A OK:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK:	REPLACE	REPLACE:	SIZE:	CNTLVLV CNTLVLV	N/A OK: OK: X	RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: N/A: X	OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A: N/A: N/A: X	OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: N/A: X	OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: N/A: X	OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A: X 2* CW CC	OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: N/A: X	OK: X OK: X OK: X OK: X OK: DK:	REPLACE: REPLACE: REPLACE: REPLACE: /E (3-WAY)	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: X 2* CW CC	OK: X OK: X OK: X OK: DNTROL VALV	REPLACE: REPLACE: REPLACE: REPLACE: /E (3-WAY)	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: X 2* CW CC	OK: X OK: X OK: X OK: DNTROL VALV	REPLACE: REPLACE: REPLACE: REPLACE: /E (3-WAY)	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: X 2* CW CC	OK: X OK: X OK: X OK: DNTROL VALV	REPLACE: REPLACE: REPLACE: REPLACE: /E (3-WAY)	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: X 2" CW CO	OK: X OK: X OK: X OK: DNTROL VALV OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: /E (3-WAY)	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: N/A: N/A: X 2* CW CC	OK: X OK: X OK: X OK: DNTROL VALV	REPLACE: REPLACE: REPLACE: REPLACE: /E (3-WAY)	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	N/A OK: OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN

CHECKED BY:

AJN

								701
				7654		FILE:	7654.XLS	
			G UNIT - HVAC		OBSERVA	TIONS		
AHU NO.:	AHU-2	LOCATIO	N (Rm) MEZZA	ANINE .				
AHU TYPE:	SZ	MFG.:			MODEL:			
SZ - Single Zone		ating & Vntltng	•	an Coil (Indicate:	2P for 2 Pipe or	4P for 4 Pip	oe)	
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - Ir	nduction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	*
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	*DAMPER	RACTUATOR	LINKAGE IS DISCONN	ECTED. ACTU	ATOR		DPR-ACT = Damp	er Actuator
	CONTRO	LS OA & RA I	DAMPERS. AHU IS VEI	RY DIRTY.			RP-ACT = Replac	e Actuator
**************************************	······································							
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:				
COMMENTS:								
					V-1			
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
INLET VANES	N/A: X	OK:	COMMENTS:	1-0				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	iTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:		1.12. 2.01		JOOMMEN		(1//)		
J. J. J. J. J. J. J. J. J. J. J. J. J. J								
								
		OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
COOLING COIL	N/A					11		
	N/A: N/A:	i	IREPLACE:	ISIZE'	CNTI VI V	IIOK: X	IRP- ACT:	IRP-RD
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL	N/A: N/A:	i	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A:	OK: X	i				RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT: RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT: RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	ок: х	RP- ACT: RP- ACT:	RP-BD:
AHU PUMP MOTOR	N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	ок: х	RP- ACT: RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	ок: х	RP- ACT: RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	ок: х	RP- ACT: RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	ок: х	RP- ACT: RP- ACT:	RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK: X	RP- ACT: RP- ACT: RP-ACT = Replace RP-BD = Replace	RP-BD RP-BD • Actuator Body
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK: X	RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator Body

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7654

FILE: 7654.XLS

	AIR	HANDLIN	G UNIT - HVAC	JPGRADE	OBSERVA [*]	TIONS		
AHU NO.:	MAU-1	LOCATIO	N (Rm) KITCHE	N MEZZANINE			***	
HU TYPE:	MAU	MFG.:	DUNHAM BUSH		MODEL:	HAH-32		
SZ - Single Zone	H&V - Hea	ating & Vntltng	,	•	2P for 2 Pipe or	4P for 4 Pip	e)	
/IZ - Mulitzone	VAV - Vari	iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit l	Heater	IND - Ir	duction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
& B. DAMPER	N/A:	ок: х	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
****							RP-ACT = Replace	Actuator
ILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
NLET VANES	N/A: X	IOK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	NTS:	N/A	······································	
RETURN FAN MOTOR	OK:	REPLACE		COMMEN				
COMMENTS:		1127 2 101		1				
JOININE INTO.			i di salata di salata di salata di salata di salata di salata di salata di salata di salata di salata di salat					
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replac	e Actuator
							RP-BD = Replace	Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
PIPE INSULATION	N/A:	OK;	MISSING: X	IESTIMAT	ED QUANTITY		8' @ 2"	
DUCT INSULATION	N/A: X	OK:	MISSING:		ED QUANTITY		- 3-	
	INT. A	JOIN.	Inioonto.	LOTIMA	LO GOMMINI			····
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7654

FILE:

1 D I NA .			G UNIT - HVAC L		OBSERVA	110113		************
AHU NO.:	MAU-2	LOCATIO	· /	NINE	1,,055			
AHU TYPE:	MAU	MFG.:	DUNHAM-BUSH	0 11 /1 11	MODEL:	HAH-80		
SZ - Single Zone		ating & Vntltng		n Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone DD - Dual Duct		iable Air Vol.		Reheat System duction System				
	:UH - Unit					Toy V	TDD 4.0T	
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER E.A. DAMPER	N/A: X N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: OK: *	RP- ACT:	
ZONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT			
				SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	ACTUAT	OR DISABLE	ט			~~-	DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	e Actuator
CH TED DECTION	16174	Toy V	IDEDLACE	Total				
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:	~~~							
SUPPLY AIR FAN	MOV. V	IDEDI 4 05	FAN DEADINGS	loorus:	17.0			
	OK: X		FAN BEARINGS:	COMMEN				
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
	OK:	REPLACE	:	COMMEN	ITS:			
RETURN FAN MOTOR COMMENTS:	OK:	REPLACE		COMMEN	ITS:			
	OK:	REPLACE		COMMEN	ITS:			
COMMENTS:	OK:	REPLACE	REPLACE:	COMMEN	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:						OK: OK: X	RP- ACT:	RP-BD:
COMMENTS: COOLING COIL HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV			
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: X N/A:	ОК: ОК: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	ок: х	RP- ACT:	RP-BD:
	N/A: X N/A: N/A: X N/A: X	OK: OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: X N/A: X	OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: X N/A: X	OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: N/A: X N/A: X	OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: N/A: X N/A: X R-11 INSU	OK: OK: OK: OK: OK: JLATION ON	REPLACE: REPLACE: REPLACE: REPLACE: ROOF	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: N/A: X N/A: X R-11 INSU	OK: OK: OK: OK: OK: JLATION ON	REPLACE: REPLACE: REPLACE: REPLACE: ROOF	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: N/A: X N/A: X R-11 INSU	OK: OK: OK: OK: OK: JLATION ON	REPLACE: REPLACE: REPLACE: REPLACE: ROOF	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: N/A: X N/A: X R-11 INSU	OK: OK: OK: OK: OK: JLATION ON	REPLACE: REPLACE: REPLACE: REPLACE: ROOF	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: N/A: X N/A: X R-11 INSU	OK: OK: OK: OK: OK: JLATION ON	REPLACE: REPLACE: REPLACE: REPLACE: ROOF	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: N/A: X N/A: X R-11 INSU	OK: OK: OK: OK: OK: JLATION ON	REPLACE: REPLACE: REPLACE: REPLACE: ROOF	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD: Rectuator Body
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: N/A: X N/A: X R-11 INSU	OK: OK: OK: OK: JLATION ON OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: ROOF REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE: 7654.XLS

	REFRIGE	RATION	EQUIPMENT - H	IVAC UPGRADE OBSERVATIONS	
CHILLER / EQUIP. NO.	<u> </u>	CH-1	LOCATION (RM)	MER	
REFG. EQUIP. TYPE:		R-ACCU	MFG.: TSI	MODEL: SC2CD80S	
C-WCT = Centrifugal w/ \				CU = Reciprocating w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating v		Cooling Tow		NCT = Absorption w/ Water Side Cooling Tower	
ACCU = Air Cooled Cond				Cooling Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:					
COOLING TOWER	N/A:	OK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	OK:	REPLACE:	ISIZE:	
COMMENTS:			1		
COIVINIEN 13.					
CHILLER INSUL.	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A:	OK:	MISSING:	IESTIMATED QUANTITY:	<u>.</u>
CHW PUMP MOTOR	N/A:	lok: X	REPLACE:	SIZE: 5 HP	
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	IOK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	lok:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	IOK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:		INSULATED		and a second sec	
000000					
· · · · · · · · · · · · · · · · · · ·				Maria de la companya del companya de la companya de la companya del companya de la companya de l	

7654

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7654

FILE:

				IVAC UPGRADE OBSERVATIONS	
CHILLER / EQUIP. NO.		CH-2	LOCATION (RM)	OUTSIDE	
REFG. EQUIP. TYPE:		ACCU		JAY-PERTEX MODEL: ARC-407A-Y-94	
C-WCT = Centrifugal w/		•		CU = Reciprocating w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating		e Cooling Tow		VCT = Absorption w/ Water Side Cooling Tower	
ACCU = Air Cooled Cond		Total		Cooling Tower	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR COMP. MOTOR	N/A: X N/A: X	OK: OK:	REPLACE:	SIZE: SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	····
CT/ACCU FAN MTR	IN/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:					
COOLING TOWER	N/A:	OK: X	REPLACE:	SIZE:	
AIR COOLED COND.	N/A: N/A:	OK: X	REPLACE:	ISIZE:	
	IN/A.	JON: X	REPLACE:	SIZE:	
COMMENTS:					
CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	· · · · · · · · · · · · · · · · · · ·
CHW PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
		Jo	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	LOTHIN TIED GOT WITH THE	
COMMENTS:					
COMMENTS:					
	Nava.	Tok. V	IDEDIAGE	No.25	
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: X	OK: X	REPLACE:	SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY: 7654 File: 7654.XLS

BOILER TYPE: STM MFG.: SUPERIOR MODEL: A-250 CONVERTER TYPE: MFG: MODEL: STM Steam HTHW/HW-Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HTHW/HW-High Temp. HW to HW Cv. BOILER BURNER JATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BURNER CONTROLS WORK OK BURNER CONTROLS WORK BURNER CONTROLS WORK BURNER CONTROLS WORK BURNER CONTROLS WORK BURNE	BOILER TYPE: STM MFG:: SUPERIOR MODEL: A-250 CONVERTER TYPE: MFG:: MFG:: MODEL: MODEL: A-250 MFG:: MODEL: M	BOILER/CONVERTER NO		BLR-1	VERTER - HVAC			
CONVERTER TYPE: MFG: MODEL: STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HW - Hot Water Conv. HTHW/HW - High Temp HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BURNER CONTROLS WORK OK BLR PUMP MOTOR N/A: OK: X REPLACE: SIZE: BOILER FEED PUMP BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS:	CONVERTER TYPE: CONVERTER TYPE: STM - Steam STM/HW - Steam to Howard Conv. HTHW/STM - High Temp HW to Steam Convertor HW - Hot Water HTHW/HW - High Temp HW to HW Cv. BOILER BURNER ATMOSPHERIC: POWER: COMMENTS: BURNER CONTROLS WORK OK BURNER CONTROLS WORK BURNER CONTROLS WORK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER). 			IOR	IMODEI :	A-250
STM - Steam STM/HW - Steam to Hot Water Conv. HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. BOILER BURNER ATMOSPHERIC: BURNER CONTROLS WORK OK BURNER CONTROLS WORK BURNER CONTROLS WORK OK B	STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HW - Hot Water HTHW/HW - High Temp, HW to HW cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BURNER CONTROLS WORK OK BURNER CONTR		·	3110			The second secon	77 200
HY - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK REPLACE: SIZE: BURNER FEED PUMP BURNER FEED PUM	HY-HOI Water HTHW/HW-High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK REPLACE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SIZE: SIZE: BOILER FEED PUMP BURNENTS: SIZE: SI		STM/HW	- Steam to Ho		:HTHW/S	1	p HW to Steam Convertor
BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK REPLACE: SIZE: BOILER FEED PUMP BURNER FEED PUMP SIZE: SIZE: BURNER FEED PUMP DUMP DUANTITY: BURNER INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: BURNER FEED PUMP MISSING: ESTIMATED QUANTITY: BURNER FEED PUMP DUANTITY: DUANTITY: BURNER FEED PUMP DUANTITY: DUANTITY: BURNER FEED PUMP SIZE: SIZE: SIZE: BURNER FEED PUMP MISSING: ESTIMATED QUANTITY: BURNER FEED PUMP DUANTITY: DUANTITY: DUANTITY: BURNER FEED PUMP SIZE: SIZE: SIZE: SIZE: BURNER CONTROLS N/A: OK: REPLACE: SIZE: SIZE: BURNER CONTROLS N/A: OK: REPLACE: SIZE: BURNER CONTROLS N/A:	BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BURNER CONTROLS WORK OK BUR PUMP MOTOR N/A: OK: X REPLACE: SIZE: BOILER FEED PUMP BUR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: BUR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: N/A: N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:						•	•
BURNER CONTROLS WORK OK BURNER CONTROLS WORK OK BUR PUMP MOTOR N/A: OK: X REPLACE: SIZE: BOILER FEED PUMP BUR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: BER INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HIW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HIW PUMP SEALS N/A: X OK: REPLACE: SIZE: HIW PUMP MOTOR N/A: OK: REPLACE: SIZE: HIW PUMP SEALS N/A: OK: REPLACE: SIZE: HIW PUMP MOTOR N/A: OK: REPLACE: SIZE: HIW PUMP MOTOR N/A: OK: REPLACE: SIZE: HIW PUMP MOTOR N/A: OK: REPLACE: SIZE: HIW PUMP SEALS N/A: OK: REPLACE: SIZE: HIW PUMP MOTOR N/A: OK: REPLACE: SIZE: HIW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE:	COMMENTS: BURNER CONTROLS WORK OK BLR PUMP MOTOR N/A: OK: X REPLACE: SIZE: BOILER FEED PUMP BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: COV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:					OK:	Χ	REPLACE:
BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:	BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: SIZE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CV PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CV PUMP MOTOR N/A: N/A: OK: MISSING: ESTIMATED QUANTITY:	COMMENTS:	BURNER	CONTROLS '	WORK OK	,		
BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS:	BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: SIZE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CV PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CV PUMP MOTOR N/A: N/A: OK: MISSING: ESTIMATED QUANTITY:	· · · · · · · · · · · · · · · · · · ·						
BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS:	BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: SIZE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CV PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CV PUMP MOTOR N/A: N/A: OK: MISSING: ESTIMATED QUANTITY:							
BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS:	BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: SIZE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CV PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CV PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CV PUMP MOTOR N/A: N/A: OK: MISSING: ESTIMATED QUANTITY:							
COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:	COMMENTS: BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: REPLACE: SIZE: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:				i i	1	BOILER F	EED PUMP
BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: SIZE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: SIZE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: SIZE: SIZE: COMMENTS: COMMENTS: COMMENTS: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE:	BLR INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X* MISSING: ESTIMATED QUANTITY: COMMENTS: *ACM INSUL. HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:		N/A:	IOK: X	REPLACE:	SIZE:		
PIPE INSULATION	PIPE INSULATION	COMMENTS:						
PIPE INSULATION	PIPE INSULATION			100.7				
PIPE INSULATION	PIPE INSULATION	RI P INICI II ATIONI	IN/A	IOK: X*	IMISSING:	IESTIMA	TED QUANTIT	γ.
COMMENTS: *ACM INSUL. REPLACE: SIZE:	COMMENTS: *ACM INSUL. COMMENTS: *ACM INSUL. REPLACE: SIZE: S		<u> </u>					
HW PUMP MOTOR	HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:				inioonito.	1 C T TWIN	123 00/11111	1.4
HW PUMP SEALS N/A: X OK: REPLACE: SIZE:	HW PUMP SEALS	-						
HW PUMP SEALS	HW PUMP SEALS							· · · · · · · · · · · · · · · · · · ·
HW PUMP SEALS	HW PUMP SEALS	HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SiZE:		
HW PUMP SEALS	HW PUMP SEALS			OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	HW PUMP MOTOR	HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	HW PUMP SEALS	HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE:	HW PUMP MOTOR	HW PUMP MOTOR	111			1		
HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:	HW PUMP SEALS	HW PUMP SEALS	N/A:	OK:	REPLACE:			
COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:	CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	HW PUMP MOTOR	N/A:	OK:				
CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:	CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:	CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	COMMENTS:						
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:	CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:							
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:	CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:							
COMMENTS:	CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:		11	T .				
	CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:		N/A: X	JOK:	JREPLACE:	SIZE:		
CV INSULATION IM/A: X TOK: IMISSING: TESTIMATED QUANTITY:	CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	COMMENTS:						
[[CV INSULATION][N/A; X TOK;] MISSING; [ESTIMATED QUANTITY;	CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:							
ICV INSULATION IIN/A: X TOK: 1MISSING: 1ESTIMATED QUANTITY:	CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	0.7.10.111.4.7:011	IGUA N	TO1/	IMICOINO	ICOTUAN	TED OLIANITIT	V.
	COMMENTS:		N/A: X	Jok:	IMISSING:	ESTIMA	TED QUANTII	Υ.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7654

FILE:

	BOILER	& CONV	ERTER - HVAC UF	GRADE OBSERVATIO	NS
BOILER/CONVERTER NO.		CV-1,2	LOCATION (RM)	KITCHEN MEZZANINE	
BOILER TYPE:	TYPICAL O	F 2	MFG.: SUPERIOR	MODEL:	
CONVERTER TYPE:		HW STM/HW		MODEL:	
STM - Steam		Steam to Hot V		HTHW/STM - High Temp HW to	
HW - Hot Water	HTHW/HW	- High Temp. I	HW to HW Cv.	DHW - Domestic Hot Water Conv	vertor
BOILER BURNER	ATMOSPHE	RIC:	POWER:	OK: REPL	ACE:
COMMENTS:	CONTROL'	VALVE GOOD)		
			· · · · · · · · · · · · · · · · · · ·		
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:			A		

BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:					

HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:				20	
CV PUMP MOTOR	N/A: X	Ток:	REPLACE:	[SIZE:	
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:	J	1	1	I	
V CHINETTI VI					
OVER ATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	ASBESTOS
CV INSULATION			THICOING: V	IESTIMATED QUANTITY:	
CV PIPE INSUL.	N/A:	OK:	MISSING: X	LOTHWATED GOARTHIT.	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG: **7654** FILE: 7654.XLS

	BOILE	R & CON	VERTER - HV	AC UPGRADE OBSERVATI	ONS
BOILER/CONVERTER NO		CV-3	LOCATION (RM)	MEZZANINE	
BOILER TYPE:			MFG.:	MODEL:	
CONVERTER TYPE:		STM/HW	MFG.:	MODEL:	
STM - Steam	:STM/HW	- Steam to Ho	t Water Conv.	HTHW/STM - High Temp HW	to Steam Convertor
HW - Hot Water	HTHW/HV	V - High Temp	o. HW to HW Cv.	DHW - Domestic Hot Water C	onvertor
BOILER BURNER	ATMOSPI	HERIC:	POWER:	OK: RE	PLACE:
COMMENTS:	4' -4" X 6"	CONVERTE	R		
	PERIMET	ER RADIATIO	ON W/MANUAL SHU	T-OFF VALVES	
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
BLR INSULATION	N/A: X	ок:	MISSING:	ESTIMATED QUANTITY:	
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:					
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:	NOT BOL	TED TO PAD	, WIRES HANGING	OUT.	
	161/4	Toy V	IDEDI ACE	TOUTE.	
CV PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:					
OVINOUR ATION	JAI/A	TOV	IMICCINO: Y		O: ∨ 40"
CV INSULATION	N/A:	OK:	MISSING: X	ESTIMATED QUANTITY:	2' X 10"
CV PIPE INSUL.	N/A:	ок:	MISSING: X	ESTIMATED QUANTITY:	2' X 10" 3' X 3"
	N/A:	ок:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7804 BLDG NAME: ENL PERS DIN

GAS METER: N

SUSPECT ACM:

CONDITIONED SQFT:

13,493

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 23

WED: SUN: MON: TUE: THUR: FRI: SAT: 0 0 0 0 0 PRES START: 0 0 24 24 24 24 24 24 24 PRES STOP: 5 5 6 REQ START: 6 5 5 5 24 24 24 24 24 24 REQ STOP:

REMARKS:

SUSPECT ACM LOCATED ON BOILER FLUE

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

	BUILDING NUMBER AHU NUMBER			AHU LOCATION	I: MF77		<u> </u>	
	REFRIG SYS # SRVNG A	HU: <u>CH-1</u>	% OF BLDG	SERVES AREA: AREA HEATED:	DINNING		25	
ſ	AHU UNIT TYPE SINGL	E ZONE		NU	JMBER OF Z	ONES IF MZ	UNIT: 0	
_	CFM-HTG:	7	7,000	CFM-CLG:	,	7,000		_
	MIN %OA:		30	MAX %OA:		100		
N.	AMEPLATE	,						
	UNIT MFG:	DUNHAM/BUSH		UNI	T MODEL:	HAH-80		
	SUPPLY FAN HP:		5	RET/EXI	H FAN HP:		0	
	SUPPLY FAN MTR MFG:	CENTURY		RET/EXH FAN			i	
	SUPPLY FAN MTR MODEL:	6-322465-01		RET/EXH FAN MT	R MODEL:			
	COMMENTS:						-	
C	OILS							
	Coil	Coil Type	•	Modulating '	Valve?			
	PREHEAT COIL:	STEAM						
	HEATING COIL:	STEAM						
	REHEAT COIL:	NONE		_ 📙				
	HUMIDIFIER:	NONE		_				
	COOLING COIL:	CW						
S	CHEDULE							
	DAY SCHEDULE NO:	23			MONTH S	CHEDULE NO	O:3	
	SCHEDULE COMMENTS:							
	SUN:	MON: TUE:	WED: THE	JR: FRI:	SAT:			
	PRES START: 0	0 0	0	0 0	0			
	PRES STOP: 24	24 24	24	24 24	24		:	
	REQ START: 6	5 5	5	5 5	6		!	
	REQ STOP: 24	24 24	24	24 24	24			
М		MAR: APR: I	MAY: JUN:	JUL: AUG:	SEP: O	CT: NOV:	DEC:	
	ON:							
C	ONTROLS							
	TYPE OF CONT	ROLS: PNEUM	ATIC	THERM	OSTAT TYP	E: SINGLE	SETPOINT	
	PRESENT TEMP WINTE	ROCC:	70		DECK DEG		0	
	PRESENT TEMP WINTR U	NOCC:	70		DECK DEG	-	0	
	PRESENT TEMP SUM	4 OCC:	70	OTHER SETPO	ED AIR DEG	 	O	
	PRESENT TEMP SUM U		70	OTHER SET		—	0	
	MIN OA DMPR CONTROL	.: N MIX	ED AIR DMPR (CONTROL: T	IMPLEME	NT DEMAND	LIMIT CNTRI	.s? N
	MAX OA DMPR CONTROL		NOMIZER DB				TIME CLO	=
	RET AIR DMPR CONTROL		NOMIZER WB		TI	ME CLOCK O		=
	EXH AIR DMPR CONTROL	.: N						
	OTHER CONTROLS D	ESCR:						
	CONTROLS COMM	IENTS:						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS PREPARED BY: JM/AJN

7 11.0 1 1			
BUILDING NUMBER		AUULI OCATION. MEZZ	
AHU NUMBE	R: AHU-2	AHU LOCATION: MEZZ	
REFRIG SYS # SRVNG A		SERVES AREA: DINNING	
	% OF BLDG	G AREA HEATED:	25
AHU UNIT TYPE SING	LE ZONE	NUMBER OF ZONES IF MZ L	JNIT: 0
CFM-HTG:	7,250	CFM-CLG: 7,250	
MIN %OA:	30	MAX %OA: 100	
NAMEPLATE			
UNIT MFG:	DUNHAM/BUSH	UNIT MODEL: HAH-80	
SUPPLY FAN HP:		RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	BALDOR	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	STEAM	\boxtimes	
HEATING COIL:	STEAM		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	23	MONTH SCHEDULE NO	3
SCHEDULE COMMENTS:			
	MON THE MED T	UID. EDI. CAT.	
SUN:		HUR: FRI: SAT:	1
PRES START: 0	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	0 0 0	
PRES STOP: 24	24 24 24 5 5 5	24 24 24 5 5 6	,
REQ START: 6 REQ STOP: 24	5 5 5 24 24 24	24 24 24	1
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV:	DEC:
ON:			
CONTROLS			
TYPE OF CON	TROLS: PNEUMATIC		SETPOINT
PRESENT TEMP WINT	R OCC: 0	HOT DECK DEG F:	<u>0</u>
PRESENT TEMP WINTR U	JNOCC: 0	MIXED AIR DEG F:	O; O.
PRESENT TEMP SU	M OCC: 60	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM L		OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTRO	L: N MIXED AIR DMPF	CONTROL: N IMPLEMENT DEMAND I	IMIT CNTRLS? N
MAX OA DMPR CONTRO	==		TIME CLOCK: N
RET AIR DMPR CONTRO	L: Y ECONOMIZER WE	CONTROL: N TIME CLOCK C	PERATIONAL? N
EXH AIR DMPR CONTRO	 	_	
OTHER CONTROLS	DESCR:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

BUILDING NUMBE			
AHU NUMBE	:R: <u>HV-1</u>	AHU LOCATION: MEZZ	
REFRIG SYS # SRVNG A	AHU:	SERVES AREA: KITCHEN	
	% OF BL	DG AREA HEATED: 75	
AHU UNIT TYPE HEA	TING AND VENTILATING	NUMBER OF ZONES IF MZ UNIT: 0	
CFM-HTG	: 11,400	CFM-CLG: 0	
MIN %OA		MAX %OA: 100	
NAMEPLATE			
UNIT MFG	: DUNHAM/BUSH	UNIT MODEL: HAH-80	
SUPPLY FAN HP		RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG	: MARATHON	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL	:	RET/EXH FAN MTR MODEL:	
COMMENTS	1		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL	: NONE		
HEATING COIL	: STEAM		
REHEAT COIL	: NONE		
HUMIDIFIER	: NONE		
COOLING COIL	: NONE		
SCHEDULE			
DAY SCHEDULE NO:	23	MONTH SCHEDULE NO: 1	
SCHEDULE COMMENTS:		1	
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 6	5 5 5	5 5 6	
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB: ON:	MAR: APR: MAY: JUN	I: JUL: AUG: SEP: OCT: NOV: DEC:	
CONTROLS			_
TYPE OF CON	ITROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT	-
PRESENT TEMP WINT	TR OCC: 60	HOT DECK DEG F: 0	
PRESENT TEMP WINTR	,	COLD DECK DEG F: 0	
PRESENT TEMP SU	JM OCC: 0	MIXED AIR DEG F: 0	
PRESENT TEMP SUM I		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: 0	
MIN OA DMPR CONTRO	DL: N MIXED AIR DMP	R CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?	N
MAX OA DMPR CONTRO			N
RET AIR DMPR CONTRO	L: N ECONOMIZER W		N
EXH AIR DMPR CONTRO	DL: N		
OTHER CONTROLS	DESCR-		
	MENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN

EMC NO: 1406-001

BUILDING NUMBER	7804				
AHU NUMBER	: HV-2	AHU LOCATION	: ABOVE CEILI	NG KITCHEN	
REFRIG SYS # SRVNG AF	U:	SERVES AREA:	KITCHEN		
	% OF B	LDG AREA HEATED:		8	
AHU UNIT TYPE HEATI	NG AND VENTILATING	NU	IMBER OF ZONE	S IF MZ UNIT:	0
CFM-HTG:	3,600	CFM-CLG:		0	
MIN %OA:	100	MAX %OA:		100	
NAMEPLATE					···
UNIT MFG:	DUNHAM/BUSH	UNI	T MODEL: HAH	-32	
SUPPLY FAN HP:	1.5	RET/EXI	H FAN HP:	0	
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN	MTR MFG:		
SUPPLY FAN MTR MODEL:	6C145TTDR7033B	RET/EXH FAN MT	R MODEL:		
COMMENTS:					
COILS					<u>-</u>
Coil	Coil Type	Modulating	Valve?		
PREHEAT COIL:	NONE				
HEATING COIL:	STEAM	<u>×</u>			
REHEAT COIL:	NONE	Ц			
HUMIDIFIER:	NONE	<u> </u>			
COOLING COIL:	NONE	Ш			
SCHEDULE					
DAY SCHEDULE NO:	23		MONTH SCHE	DULE NO:	1
SCHEDULE COMMENTS:					:
	MON THE WED.	TIME. FDI.	CAT.		
SUN:	MON: TUE: WED:	THUR: FRI:	SAT: 0		1
PRES START: 0	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	24 24	24		
PRES STOP: 24		5 5	6		1
REQ START: 6 REQ STOP: 24	5 5 5 24 24 24	24 24	24		
REUSIUP. 24	24 24 24				
MONTHS JAN: FEB:	MAR: APR: MAY: JU	JN: JUL: AUG:	SEP: OCT:	NOV: DEC:	
ON:					!
CONTROLS					
TYPE OF CONT	ROLS: PNEUMATIC	THERN	OSTAT TYPE:		:
DOCOCNIT TEMP MAINTE	ROCC: 0	т нот	DECK DEG F:		0
PRESENT TEMP WINTS	,	≓ COLD	DECK DEG F:		0
PRESENT TEMP WINTR U	NOCC:	MIX	ED AIR DEG F:		0
PRESENT TEMP SUM	MOCC: C	OTHER SETPO	INT DESCRIP:		
PRESENT TEMP SUM U	NOCC: C	OTHER SET	POINT DEG F:		0
MIN OA DMPR CONTROL	.: N MIXED AIR DI	MPR CONTROL: N	IMPLEMENT D	EMAND LIMIT C	NTRLS? N
		DB CONTROL: N		TIME	CLOCK: N
MAX OA DMPR CONTROL	.: Y ECONOMIZER	DB CONTROL: [N]		· · · · · · · · · · · · · · · · · · ·	
MAX OA DMPR CONTROL RET AIR DMPR CONTROL		WB CONTROL: N	TIME	CLOCK OPERAT	
	.: N ECONOMIZER	· · ·	TIME		
RET AIR DMPR CONTROL	ECONOMIZER	· · ·	TIME		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94

PREPARED BY: JM/AJN

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUM	BER: 7	7804				BOILER	RM LOCA	ATION:	MER		
BOILER UNI	T										
SOURCE OF BI	_DG HEA	Λ Τ	BLR/CON	IVERTER	SERVES A	REA OR S	ERVICE:	SPACE	HEAT &	DHW	
● ⊠ BOILER BOILER BOILER T FUEL T	TAG:	BLR-1 MED PRESS	S STEAM (18	5# TO 125#,		CONVERTE DNVERTE NVERTER NV HT SC	R TAG:				
CENTRAL F	PLANT D	IRECT									· ·
NAMEPLAT	E				% AREA I	IEATED B	Y BB RAI	DIATION:			17
	AWNEE 250						PUT (BTU PUT (BTU	-		6,900,00 8,625,00	790 % 7
DAYS SCHEDULE	===	10					MONTH	I SECHD	ULE NO:		3
PRES START: PRES STOP: REQ START: REQ STOP:	SUN: 0 24 0 24	MON: 0 24 0 24	TUE: 0 24 0 24	WED: 0 24 0 24	THUR: 0 24 0 24	FRI: 0 24 0 24	SAT: 0 24 0 24				:
MONTHS JAN: ON:	FEB:	MAR:	APR:		JUN: JUL		SEP:	ост: 	NOV:	DEC:	
CONTROLS											
TYPE OF BURN	TING SE	TPOINT:	PNEUM		EG F or PSI	G	RESE	T CONTR	ROLS: [N	
CONTRO	LS COM	MENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94

PREPARED BY: JM/AJN

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING	NUMBER:	7804	:			BOILER	RM LOCA	ATION:	MEZZ		
BOILER (JNIT										
COURCE	DE DI DO HE	A T	BLR/CON	VERTER S	SERVES AF	EA OR S	ERVICE:	BB RAI	NOITAIC		
SOURCE (OF BLDG HE	A1									
	ILER					ONVERT	_				
BO	ILER TAG:					NVERTER	=	CV-1	· · · · · · · · · · · · · · · · · · ·		
	ER TYPE:					VERTER	<u> </u>	тн от мта	THW		
Fl	JEL TYPE:				CON	IV HT SO	URCE:				
CENT	RAL PLANT [DIRECT									
NAMEPL	ATE				% AREA H	EATED B	Y BB RAI	DIATION			17
BOILER MFG	:				BLR	CAP OUT	PUT (BTU	H):		(0_
UNIT MODEL					BLI	R CAP INF	PUT (BTU	H):		(0
COMMENTS											
COMMENTS	·										
CHEDU	LE										
DAYS SCHE	DULE NO:	23					MONTH	SECHE	ULE NO:	:	1
SCHEDULE CO	:										
-	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES STAF	RT: 0	0	0	0	0	0	0				
PRES STO	OP: 24	24	24	24	24	24	24				•
REQ STAF	रा:6	5	5	5	5	5	6				
REQ STO	OP: 24	24	24	24	24	24	24				
MONTHS JA	AN: FEB:	MAR:	APR: I	MAY: JI	UN: JUL	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	\boxtimes	\boxtimes						\boxtimes	\boxtimes	\boxtimes	
CONTRO	LS										
TYPE	OF BLR CO	NTROLS:	PNEUMA	ATIC			RESE	T CONTI	ROLS: [N	
OP	ERATING SE	ETPOINT:		0 DE	G F or PSIC	3					
TYPE OF I	BURNER CO	NTROLS:									
CO	NTROLS CO	MMENTS:									
HW PUM	P										
PUMP TA	\G: 1		PUMP	HP:		1.5	PUMP MI	G: U.S	S. ELECTI	RIC	
PUMP SERVI	CE: HW PUI	MP				PU	MP MODI	EL:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94

PREPARED BY: JM/AJN

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 7804	1	BLDG NAME:	ENL PERS DIN			
REF. UNIT NUMBER/TAG	G: CH-1		LOCATI	ON (MER#):	MER	
				'S SERVED:		
דואט	TTYPE RECIPROCA	ATING WITH AIR C	OOLED COND	ENSING UNIT		
NAMEPLATE						
CHILLER MFG:	TSI		TOWER N	IFG: MCQL	AY PERTE	X
CHILLER MODEL:	SC2CD80S	#	OF TOWER FA	NS:		6
CHILLER SERIAL NO:	7995-4		TOWER FA	N V:		208
CHILLER V:	2	08 T	OWER FAN AN	IPS:		3
CHILLER AMPS:	Particular V Particular Application of Maria Advisor - Maria Application - The Appli	25	TOWER FAN	HP:		1
CHILLER PH:		3				
CHILLER CAP (TONS):	73	3.8				
COMMENTS:						
SCHEDULE						
DAYS SCHEDULE			MONTHS SCI	HEDULE NO:	2	
SCHEDULE COMME	NTS:					
SUN	: MON: TUE:	WED: THUR:	FRI: S	SAT:	-	:
PRES START:	0 0 0	0 0	0	0		
PRES STOP: 24	4 24 24	24 24	24	24		:
	6 5 5	5 5	5	6		
REQ STOP: 24	4 24 24	2424	24	24		
MONTHS JAN: FEB:	: MAR: APR: I	MAY: JUN: JI	JL: AUG:	SEP: OC	T: NOV:	DEC:
ON:			\boxtimes			
	⊔ ⊔				<u> </u>	
CONTROLS						
TYPE OF CONTR	ROLS: PNEUMATIC					
	DOINT.	0	CNWS SETP	OINT:		0
CWS SETF	POINT.					
CWS SETF		0	CNWR SETP			0
CWR SET	POINT:	0	CNWR SETP	OINT:	one.	0.
CWR SETF	POINT:	0 TEMP LITE HI:	CNWR SETP		DRS:	0.
CWR SETF PRESS LI PRESS LITE	POINT: ITE HI: N E LOW: N T	0 TEMP LITE HI: [EMP LITE LOW: [CNWR SETP	OINT:	DRS:	0
CWR SETF PRESS LI PRESS LITE PRESS GAI	POINT: ITE HI: N LOW: N T UGES: N	0 TEMP LITE HI:	CNWR SETP	OINT:	DRS:	0
CWR SETF PRESS LITE PRESS GAI CONTROLS CO	POINT: ITE HI: N E LOW: N T UGES: N	0 TEMP LITE HI: [EMP LITE LOW: [CNWR SETP	OINT:	DRS:	0
CWR SETF PRESS LITE PRESS GAI CONTROLS CO	POINT: ITE HI: N E LOW: N T UGES: N	0 TEMP LITE HI: [EMP LITE LOW: [CNWR SETP	OINT:	DRS:	0
CWR SETF PRESS LITE PRESS GAI	POINT: ITE HI: N E LOW: N T UGES: N	0 TEMP LITE HI: [EMP LITE LOW: [TEMP GAUGES: [CNWR SETP	OINT:		0

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

FILE:

Nov-94

PREPARED BY:

CWW

CHECKED BY:

7804.XLS

AJN

AHU NO.:	AHU-1	LOCATION	G UNIT - HVAC UNIT - MEZZ	ABOVE KITCHEN				
HU TYPE:	7,1,10	MFG.:	TRANE CLIMATE CH		MODEL:	L-14		
SZ - Single Zone	H&V - Hea	iting & Vntltng		n Coil (Indicate 2F	for 2 Pipe or	4P for 4 Pipe	2)	
MZ - Mulitzone		able Air Vol.		Reheat System	,	•	,	
DD - Dual Duct	UH - Unit I			duction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	O. A. AND	R. A. INTERI	OCKED				DPR-ACT = Dampe	er Actuator
							RP-ACT = Replace	Actuator

FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:		· · · · · · · · · · · · · · · · · · ·		
COMMENTS:								***********
JOHN TO.						· · · · · · · · · · · · · · · · · · ·		
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMENT	S:	,. ,		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMENT		LINCOLN	3 HP	
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMENT	S.	N/A		
RETURN FAN MOTOR	OK:	IREPLACE		COMMENT		11//		
			G IS TAPED UP WITH D		o.			
COMMENTS:	NEW COIL		3 15 TAPED OF WITH L	OCT TAPE				
	NEW COI	LS						
COOLING COIL	MNI/A.	OK: X	REPLACE:	SIZE: 2.5"	CNTLVLV	OK: X	RP- ACT:	RP-BD:
	N/A: N/A:	OK: X	REPLACE:	SIZE: 2.3	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE: 2	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
			ALVE HAS LEAKY STE		ONTEVEV			
COMMENTS:	COOLING	CONTROL	ALVE HAS LEART STE	IVI			RP-ACT = Replace	
							RP-BD = Replace I	Body
					· · · · · · · · · · · · · · · · · · ·			
ALUL DUMD MOTOR	Thus. V	Tov.	IDEDLACE:	SIZE:				
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	JOILE.			· · · · · · · · · · · · · · · · · · ·	
COMMENTS:				1811 11 11 11 11				
					5.000	5005	NIDITION (ALL	
PIPE INSULATION	N/A:	OK:	MISSING:				ONDITION (ALL	.)
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMATE	D QUANTITY			
COMMENTS:								

7804

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

CWW

PREPARED BY:

CHECKED BY:

BLDG:

7804

FILE:

	AIR H	ANDLIN	G UNIT - HVAC L	IPGRADE (OBSERVA"	TIONS		
HU NO.:	AHU-2	LOCATIO	N (Rm) MEZZ /	ABOVE REST R	OOM			
AHU TYPE:	SZ	MFG.:	TRANE CLIMATE CH	HANGER	MODEL:	L-14		
SZ - Single Zone	H&V - Hea	ating & Vntltng	j. FC - Fa	n Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	e)	
NZ - Mulitzone	VAV - Var	iable Air Vol.	RHT - F	Reheat System				
D - Dual Duct	UH - Unit	Heater	IND - Ir	duction System				
D.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
ILTER SECTION	76174	TOV: V	IDED! ACE.	IO17F				
COMMENTS:	N/A:	OK: X	REPLACE:	SIZE:				
ONINICIA I O.			4-1-2-1					
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:	3 HP		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
NLET VANES	N/A: X	OK:	COMMENTS:	,				
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	ITS:			
COMMENTS:	CHILLED	WATER PUN	IP O.K. 5HP, UNINSULA	TED, RUSTED				
						····		
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: **	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	** LEAKIN	IG					RP-ACT = Replace	Actuator
							RP-BD = Replace I	Body
							-	
AHU PUMP MOTOR	N/A: X	JOK:	REPLACE:	SIZE:				·
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:			1.751 0.705.	JOILE.				
O O ITATILITY O.								
				· · · · · · · · · · · · · · · · · · ·				
PIPE INSULATION	N/A:	OK:	MISSING: X		ED QUANTITY:		1/2"	
DUCT INSULATION	N/A:	ОК: Х	MISSING:	ESTIMAT	ED QUANTITY:			
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY:

7804.XLS

CWW AJN

CHECKED BY: 7804 FILE: 780

	AIK F	IANULIN	G UNIT - HVAC UP	GRADE	OR2EKAN	IIONS		
AHU NO.:	MAU-1	LOCATIO	N (Rm) MEZZ ABO	OVE KITCHE				
AHU TYPE:	MAU	MFG.:			MODEL:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
SZ - Single Zone		ating & Vntltng			2P for 2 Pipe or	4P for 4 Pipe	∍)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		eat System				
DD - Dual Duct	UH - Unit I	Heater	IND - Indu	ction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	TRANE: T	ORRIVENT N	MOD # T-10				DPR-ACT = Dampe	er Actuator
	MARATHO	ON ELECTRIC	C 1-1/2 HP				RP-ACT = Replace	Actuator
	FACE AN	D BYPASS D	AMPER					
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	ОК:	IDEDI ACE	FAN BEARINGS:	TOOLIVE	ITC.	N/A		
KETUKIYAIK FAN	IION.	INCLEACE	FAN DEARINGS.	COMMEN	NIO.	IN/A		
						IN/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		IV/A		
RETURN FAN MOTOR						IV/A		
RETURN FAN MOTOR COMMENTS:	OK:	REPLACE		СОММЕ	NTS:			
RETURN FAN MOTOR COMMENTS: COOLING COIL	OK:	REPLACE OK: X	REPLACE: CLEAN COIL	COMMEN SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	N/A: N/A:	OK: X	REPLACE: CLEAN COIL	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: CLEAN COIL REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	REPLACE: CLEAN COIL	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: CLEAN COIL REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: CLEAN COIL REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: CLEAN COIL REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: CLEAN COIL REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: CLEAN COIL REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: CLEAN COIL REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: CLEAN COIL REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: CLEAN COIL REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN FAN MOTOR RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: N/A: N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK:	REPLACE: CLEAN COIL REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

BLDG:

7804

FILE:

	AIR F	IANDLING	UNIT - HVAC UP	GRADE (OBSERVA	TIONS		
AHU NO.:	MAU-2	LOCATION	I (Rm) MEZZ AB	OVE RESTRO	OOM			
AHU TYPE:	MAU	MFG.:	TRANE TORRIVENT		MODEL:	T-21		
SZ - Single Zone	H&V - Hea	ating & Vntltng.	FC - Fan (Coil (Indicate :	2P for 2 Pipe or	4P for 4 Pipe	e)	
MZ - Mulitzone	∶VAV - Var	iable Air Vol.	RHT - Ref	neat System				
DD - Dual Duct	UH - Unit	Heater	IND - Indu	ction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	X
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	LINCON 5	-HP					DPR-ACT = Damp	er Actuator
	FACE AND	BYPASS, ACT	UATOR AND LINKAGE DIS	SABLED, WIR	ED INTO BYPAS	S MODE	RP-ACT = Replac	e Actuator
			D, FILTER ~1/2" DUST				······································	
FILTER SECTION	N/A:	OK: X	REPLACE: FILTERS	SIZE:				
COMMENTS:								· · · · · · · · · · · · · · · · · · ·
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	JTS:			
SUPPLY FAN MOTOR	OK: X		LINCOLN	COMMEN		5 HP		
INLET VANES	N/A: X	IOK:	COMMENTS:	OCIVIIVILIN	110.	0111		
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	JTC:	N/A		
RETURN FAN MOTOR	OK:	REPLACE:		COMMEN		IN/A		
COMMENTS:	Or.	INEFLACE.		COMMEN	VIO.			
COMMENTS.		***************************************						
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	CONTRO	_ VALVE, 2-W	AY STEAM				RP-ACT = Replac	e Actuator
							RP-BD = Replace	Body
Military and the second								
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				***************************************
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				10.10
COMMENTS:								
PIPE INSULATION	N/A:	IOK:	MISSING: POOR	ESTIMAT	ED QUANTITY:		12' @ 2"	
PIPE INSULATION DUCT INSULATION	N/A:	OK:	MISSING: POOR		ED QUANTITY: ED QUANTITY:		12' @ 2"	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7804

FILE:

NULLED / FOURD NO			LOCATION (RM)	OUTSIDE OBSERVATIONS	
CHILLER / EQUIP. NO.		CH-1 R-ACCU	1 ' '	ED PRODUCTS MODEL: ACDR	***
REFG. EQUIP. TYPE:	Mara Cida			CU = Reciprocating w/ Air Cooled Condensing Unit	
C-WCT = Centrifugal w/ R-WCT = Reciprocating				VCT = Absorption w/ Water Side Cooling Tower	
R-vvC1 = Reciprocating ACCU = Air Cooled Cond		-		Cooling Tower	
	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A: N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
			REPLACE:	SIZE: TYPICAL OF 6	
CT/ACCU FAN MTR	N/A: N/A:	OK: X	REPLACE:	SIZE: 11FICAL OF 6	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	IN/A.	JON.	INEFLACE.	JIZL.	
COMMENTS:					
COOLING TOWER	N/A:	JOK:	IREPLACE:	SIZE:	
AIR COOLED COND.	N/A: N/A:	OK: X	REPLACE:	SIZE:	
	JIN/A:	JON: X	IKEPLACE:	JOIZE.	
COMMENTS:					
OUR LED INC.	TINIA	IOV:	IMICCINO:	IESTIMATED QUANTITY:	
CHILLER INSUL.	N/A:	OK:	MISSING:		
CHW PIPE INSUL. COMMENTS:	N/A: 4 - 4" 90'	OK: S AND 3' OF 4	MISSING: X MISSING, NEED ME	ESTIMATED QUANTITY: "AL JACKET ~35"	
		S AND 3' OF 4	MISSING, NEED ME	AL JACKET ~35'	
COMMENTS: CHW PUMP MOTOR	4 - 4* 90':	S AND 3' OF 4	MISSING, NEED ME	AL JACKET ~35'	
COMMENTS:	4 - 4" 90':	S AND 3' OF 4	MISSING, NEED ME	SIZE: SIZE:	
COMMENTS: CHW PUMP MOTOR	4 - 4" 90': N/A: N/A: N/A:	OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS	4 - 4" 90': N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	4 - 4* 90': N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	4 - 4* 90': N/A:	OK: X OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7804

FILE:

	BOILE	R & CON	IVERTER - HVA	C UPGRADE	OBSERV	/ATIONS	
BOILER/CONVERTER NO).	BLR-1	LOCATION (RM)				
BOILER TYPE:		STM	MFG.: SUP	ERIOR	MODEL:	2-5-253	SERIAL - 5161
CONVERTER TYPE:			MFG.:		MODEL:		
STM - Steam			t Water Conv.		M - High Tem		
HW - Hot Water			o. HW to HW Cv.	DHW - Do	mestic Hot Wa	ater Converto	r
BOILER BURNER	ATMOSP		POWER:	OK:		REPLACE	
COMMENTS:	POWER I						
		VE CAP = 222					
W 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		PPROX. 15 P					
***************************************			MER; ASBESTOS ON				
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:							

DI DI INICI II ATION	Thu.	TOU V	IMOONIO	I BASHITIS		,	
BLR INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY		
PIPE INSULATION COMMENTS:	N/A:	OK:	MISSING: X	IESTIMAT	ED QUANTITY	<u> </u>	30' @ 4"
OOMINETYTO.	*****						
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		A	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	·		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:							
		· · · · · · · · · · · · · · · · · · ·					
							
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:							
CV INSULATION	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY	/:	
CV PIPE INSUL.	N/A: X	OK:	MISSING:		ED QUANTITY		
COMMENTS:						·	
			1700				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7804

FILE:

	BOILE	R & CON	VERTER - HVAC	UPGRADE OBSERVATIONS
BOILER/CONVERTER NO	D.	CV-1	LOCATION (RM)	MEZZANINE ABOVE KITCHEN
BOILER TYPE:	TYPICAL	OF 2	MFG.:	MODEL:
CONVERTER TYPE:	STM/HW		MFG.:	MODEL:
STM - Steam	STM/HW -	Steam to Ho	t Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water			o. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSPI	HERIC:	POWER:	OK: REPLACE:
COMMENTS:	DOMEST	C HW, 2-WA`	Y CONTROL VALVE ON	STM
				And the second s
BLR PUMP MOTOR	N/A: X	lok:	IREPLACE:	SIZE:
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
			11., 2.10	- Andrew - A
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				
	44.4			
		. '		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:				
CV PUMP MOTOR	N/A: X	lok:	REPLACE:	SIZE:
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:	I MAN A	1011.	1,75, 5,05,	D
COMMENTS.				
				1.00000
CV INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A:	ок: х	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7804

FILE:

BOILER BURNER		CV-3 Steam to Hot - High Temp	LOCATION (RM) MFG.: MFG.: DUNHAP		E RESTROOM MODEL:	1	
CONVERTER TYPE: STM - Steam HW - Hot Water BOILER BURNER	STM/HW - HTHW/HW		MFG.: DUNHAI		MODEL:		
STM - Steam HW - Hot Water BOILER BURNER	STM/HW - HTHW/HW			M-BLISH			
HW - Hot Water BOILER BURNER	HTHW/HW		Water Conv			SC63-2 BASE BOARD RAD 1969 8"x40"	
HW - Hot Water BOILER BURNER COMMENTS:		/ - High Temp				W to Steam Convertor	
BOILER BURNER COMMENTS:	ATMOSPH		HW to HW Cv.		stic Hot Water		
COMMENTS:		IERIC:	POWER:	OK:		REPLACE:	
	,						
BLR PUMP MOTOR	N/A: X	lok:	IREPLACE:	SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:	[WA. A	JOIN.	INCI DAGE.	SIZL.			
JOINIVILIN 13.							
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED	QUANTITY:		
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED			
COMMENTS:	<u> </u>						
						<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	
							
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:							
	1						
CV PUMP MOTOR	N/A:	OK: X	REPLACE:		3/4 HP		
CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:			
COMMENTS:							
CV/ INICHI ATION	IINYA.	TO1/-	IMICOINO V	IEOTI (ATES	OLIANITITY.	DAMAGE	
CV INSULATION	N/A:	OK:	MISSING: X	ESTIMATED		DAMAGED	
CV PIPE INSUL.	N/A:	OK:	MISSING:	ESTIMATED	QUANTITY:	n	
COMMENTS:	* DAMAGE	ED 5' ON CON	IVERTER PUMP 1-1/2"				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7804

FILE:

.HU NO.:	RAD-1	LOCATIO	N (Rm)					
AHU TYPE:		MFG.:	7		MODEL:			* ***
SZ - Single Zone	H&V - He	ating & Vntltng	. FC - Fa	n Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pip	pe)	
MZ - Mulitzone		riable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - Ir	duction System				
O.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	MANUAL	SHUTOFF VA	LVES UNDER WINDOV	VS			DPR-ACT = Dampe	er Actuator
***************************************							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:				
COMMENTS:								
· · · · · · · · · · · · · · · · · · ·								
SUPPLY AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK:	REPLACE	: LINCON	COMMEN	ITS:			
INLET VANES	N/A:	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	ITS:			
COMMENTS:								
OOME.T.O.								

		101/	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COOLING COIL	N/A:	OK:				ок:	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL	N/A: N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	IJON.	IRP- ACT:	1
HEATING COIL				SIZE: SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL	N/A:	OK:	REPLACE:			- II		
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NAME: ENL PERS DIN **BLDG NUMBER: 7856**

ELECTRIC METER: N GAS METER: Y

CONDITIONED SQFT:

SUSPECT ACM: Y

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

MON: THUR: FRI: SAT: SUN: TUE: WED: PRES START: 0 0 0 0 0 0 0 24 24 PRES STOP: 24 24 24 24 5 5 5 5 6 6 5 REQ START: REQ STOP: 24 24 24

REMARKS:

SUSPECT ACM LOCATED ON BOILER FLUE.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/CWW

BUILDING NUMBER: 7856 AHU NUMBER: AHU-1 AHU LOCATION: MEZZ	
REFRIG SYS # SRVNG AHU: CH-1 SERVES AREA: DINNING	MANUAL RESIDENCE AND ADMINISTRATION OF THE PROPERTY OF THE PRO
% OF BLDG AREA HEATED:	25
AHU UNIT TYPE SINGLE ZONE NUMBER OF ZONES IF MZ UNIT	T: 0
CFM-HTG: 7,000 CFM-CLG: 7,000 MIN %OA: 30 MAX %OA: 100	
NAMEPLATE	
UNIT MFG: DUNHAM/BUSH UNIT MODEL: HAH-80 SUPPLY FAN HP: 5 RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG: CENTURY RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: 6-322465-01 RET/EXH FAN MTR MODEL:	unit (1,000)
COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: STEAM	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
COOLING COIL: CW	
SCHEDULE	
DAY SCHEDULE NO: 23 MONTH SCHEDULE NO: SCHEDULE COMMENTS:	3
SCHEDULE COMMENTS:	3
SCHEDULE COMMENTS:	3
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	3
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	:
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24	3
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 REQ START: 6 5 5 5 5 5 6 REQ STOP: 24 24 24 24 24 24 24 24 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DE	3 ::
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24 REQ START: 6 5 5 5 5 5 5 6 5 6 REQ STOP: 24 24 24 24 24 24 24 24 24 24 24	EC:
SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0	EC:
SUN: MON: TUE: WED: THUR: FRI: SAT:	EC:
SUN: MON: TUE: WED: THUR: FRI: SAT:	EC: POINT 0
SUN: MON: TUE: WED: THUR: FRI: SAT:	EC: ☑ POINT 0 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	EC: POINT 0
SUN: MON: TUE: WED: THUR: FRI: SAT:	EC: ☑ POINT 0 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	EC: ☑ POINT 0 0 0 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	EC: ☑ POINT 0 0 0 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	POINT 0 0 0 0 IT CNTRLS? N IME CLOCK: N
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	POINT 0 0 0 0 str cntrls? N ME clock: N
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	POINT 0 0 0 0 str cntrls? N ME clock: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/CWW

711111						
BUILDING NUMBER			AUU 1 00 ATION	L ME 77		
AHU NUMBER	: AHU-2		AHU LOCATION	I: MEZZ		
REFRIG SYS # SRVNG AF	IU: CH-1		SERVES AREA:	DINNING	05	
		% OF BLDG A	AREA HEATED:		25	
AHU UNIT TYPE SINGL	E ZONE		NU	JMBER OF ZON	IES IF MZ UNIT: 0	
CFM-HTG:	7,2	250	CFM-CLG:		7,250	
MIN %OA:		30	MAX %OA:		100	
NAMEPLATE						
UNIT MFG:	DUNHAMN/BUSH		UN	IT MODEL: HA	\H-80	
SUPPLY FAN HP:		5	RET/EX	H FAN HP: 📃	0	
SUPPLY FAN MTR MFG:	BALDOR		RET/EXH FAN	MTR MFG:		
SUPPLY FAN MTR MODEL:		R	ET/EXH FAN MT	R MODEL:		
COMMENTS:						
COILS						
Coil	Coil Type		Modulating	Valve?		
PREHEAT COIL:	STEAM					
HEATING COIL:	STEAM		_ <u>⊠</u>			
REHEAT COIL:	NONE				v.	
HUMIDIFIER:	NONE					
COOLING COIL:	CW					
SCHEDULE						
DAY SCHEDULE NO:	23			MONTH SCH	IEDULE NO: 3	
SCHEDULE COMMENTS:						
SUN:	MON: TUE:	WED: THU	R: FRI:	SAT:		
PRES START: 0	0 0	0	0 0	0		
PRES STOP: 24	24 24	24	24 24	24		
REQ START: 6	5 5	5	5 5	6		
REQ STOP: 24	24 24	24	24 24	24		
MONTHS JAN: FEB:	MAR: APR: M	AY: JUN:	JUL: AUG:	SEP: OCT:	NOV: DEC:	
ON:						
CONTROLS						
TYPE OF CONT	ROLS: PNEUMA	TIC	THERM	MOSTAT TYPE:	SINGLE SETPOINT	
PRESENT TEMP WINTE	occ.	0	НОТ	DECK DEG F:	0	
PRESENT TEMP WINTR U		0		DECK DEG F: ED AIR DEG F:		
PRESENT TEMP SUM	A OCC:	60	OTHER SETPO	OINT DESCRIP:		
PRESENT TEMP SUM U		0	OTHER SET	POINT DEG F:	0,	
MIN OA DMPR CONTROL	.: N MIXE	D AIR DMPR C	ONTROL: N	IMPLEMENT	DEMAND LIMIT CHTRLS	s? [
MAX OA DMPR CONTROL	=	NOMIZER DB C	ONTROL: N		TIME CLOC	7
RET AIR DMPR CONTROL		OMIZER WB	ONTROL: N	TIMI	E CLOCK OPERATIONAL	L? [
EXH AIR DMPR CONTROL			•	•		•
OTHER CONTROLS E	ESCD.			s 		7
OTHER CONTROLS D	MENTS:					4

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/CWW

	BUILDING NUMBER			 -	00471011	A per my my			
	AHU NUMBER	R: <u>HV-1</u>	-	_ AHU L	OCATION	: MEZZ			
	REFRIG SYS # SRVNG AI	ни:		SERVE	S AREA:	KITCHEN			
_			% OF	BLDG AREA	HEATED:	<u> </u>		25	
	AHU UNIT TYPE HEAT	ING AND VE	NTILATING		NU	MBER OF ZO	NES IF MZ	UNIT: 0	
	CFM-HTG:		11,400	С	FM-CLG:		0	70 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
	MIN %OA:		100	M	AX %OA:		100		
N	IAMEPLATE								
	UNIT MFG:	11400			UNI	T MODEL: 0)	:	
	SUPPLY FAN HP:		5		RET/EXI	H FAN HP:		0	
	SUPPLY FAN MTR MFG:	MARATHO	N	RET/	EXH FAN I	MTR MFG:			
	SUPPLY FAN MTR MODEL:			RET/EX	H FAN MT	R MODEL:			
	COMMENTS:								
C	OILS								
	Coil	Coi	I Туре	M	odulating \	Valve?			_
	PREHEAT COIL:	NONE							
	HEATING COIL:			<u> </u>					
	REHEAT COIL:								
	HUMIDIFIER:	NONE		: 🗖					
	COOLING COIL:	NONE							
S	CHEDULE								
	DAY SCHEDULE NO:	23				MONTH SC	HEDULE N	0:1	
	SCHEDULE COMMENTS:								
	SUN:	MON:	TUE: WED:	: THUR:	FRI:	SAT:		1	
	PRES START: 0	0	0 0	0	0	0			
	PRES STOP: 24	24	24 24	24	24	24			
	REQ START: 6	5	5 5	5 5	5	6			
	REQ STOP: 24	24	24 24	24	24	24			
	MONTHS JAN: FEB:	MAR: AP	R: MAY:	JUN: JUL:	AUG:	SEP: OCT	r: NOV:	DEC:	
•	ON:		П					1	
•	IXI IXI			п п			\square	- ⊠ :	
	ONTROLS								
			IEUMATIC			OSTAT TYPE		SETPOINT	
	ONTROLS	ROLS: PN	IEUMATIC	60	THERM HOT	OSTAT TYPE DECK DEG F	: SINGLE	SETPOINT 0	I
	ONTROLS TYPE OF CONT	ROLS: PN	IEUMATIC		THERM HOT COLD	OSTAT TYPE	: SINGLE	SETPOINT	· · · · · · · · · · · · · · · · · · ·
	ONTROLS TYPE OF CONT PRESENT TEMP WINTE	ROLS: PNR OCC:	IEUMATIC	60 0	THERM HOT COLD MIXE	OSTAT TYPE DECK DEG F DECK DEG F	: SINGLE	SETPOINT 0 0	:
	TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U	ROLS: PNR OCC:	IEUMATIC	60 0 0 OTHE	THERM HOT COLD MIXE	OSTAT TYPE DECK DEG F DECK DEG F	: SINGLE	SETPOINT 0 0	!
	TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM U	ROLS: PN R OCC: UNOCC:	IEUMATIC	60 0 0 OTHE 0 OT	THERM HOT COLD MIXE ER SETPO	OSTAT TYPE DECK DEG F DECK DEG F ED AIR DEG F INT DESCRIP	: SINGLE	SETPOINT 0 0 0 0 0	N
	TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL	ROLS: PNR OCC: WOCC: NOCC:	IEUMATIC	60 0 0 OTHE 0 OT	THERM HOT COLD MIXE ER SETPO HER SETF	OSTAT TYPE DECK DEG F DECK DEG F ED AIR DEG F INT DESCRIP	: SINGLE	SETPOINT 0 0 0 0 timit cntrls?	
	TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUE PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL	ROLS: PN ROCC: NOCC: NOCC: NOCC:	MIXED AIR E	60 0 0 OTHE 0 OT DMPR CONTRO	THERM HOT COLD MIXE ER SETPO HER SETF OL: N	OSTAT TYPE DECK DEG F DECK DEG F ED AIR DEG F INT DESCRIP POINT DEG F:	: SINGLE : :	SETPOINT 0 0 0 0 0 LIMIT CNTRLS?	N
	TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL	ROLS: PN ROCC: INOCC: I	MIXED AIR E	60 0 0 OTHE 0 OT	THERM HOT COLD MIXE ER SETPO HER SETF OL: N	OSTAT TYPE DECK DEG F DECK DEG F ED AIR DEG F INT DESCRIP POINT DEG F:	: SINGLE : :	SETPOINT 0 0 0 0 timit cntrls?	N
	TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUE PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL	ROLS: PN R OCC: NOCC: NO	MIXED AIR E	60 0 0 OTHE 0 OT DMPR CONTRO	THERM HOT COLD MIXE ER SETPO HER SETF OL: N	OSTAT TYPE DECK DEG F DECK DEG F ED AIR DEG F INT DESCRIP POINT DEG F:	: SINGLE : :	SETPOINT 0 0 0 0 0 LIMIT CNTRLS?	N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/10/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/CWW

7 (11 ())			
BUILDING NUMBER	₹: 7856		
AHU NUMBE	R: HV-2	AHU LOCATION: ABOVE CEILING	KITCHEN
REFRIG SYS # SRVNG A	HU:	SERVES AREA: KITCHEN	
NEI NIO OTO II OTTO		G AREA HEATED:	8
AHU UNIT TYPE HEAT	ING AND VENTILATING	NUMBER OF ZONES II	MZ UNIT: 0
CFM-HTG:	3,600	CFM-CLG:	0
MIN %OA:	100		00
NAMEPLATE			
UNIT MFG:	DUNHAM/BUSH	UNIT MODEL: HAH-32	
SUPPLY FAN HP:	1.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	The second secon	RET/EXH FAN MTR MODEL:	
COMMENTS:			4.00
OOMMENTO.			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE			
SCHEDULE			
DAY SCHEDULE NO:	23	MONTH SCHEDU	_E NO:1
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: T	HUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	¥
REQ START: 6	5 5 5	5 5 6	
REQ STOP: 24	24 24 24	24 24 24	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN	: JUL: AUG: SEP: OCT: N	OV: DEC:
CONTROLS			
TYPE OF CON	TROLS: PNEUMATIC	THERMOSTAT TYPE: SIN	GLE SETPOINT
PRESENT TEMP WINT	R OCC: 0	HOT DECK DEG F:	0.
PRESENT TEMP WINTR U		COLD DECK DEG F:	0
FRESENT TEM WHAT	J	MIXED AIR DEG F:	<u> </u>
PRESENT TEMP SU	M OCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM (JNOCC: 0	OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTRO	L: N MIXED AIR DMP	R CONTROL: N IMPLEMENT DEM	AND LIMIT CNTRLS? N
MAX OA DMPR CONTRO			TIME CLOCK: N
RET AIR DMPR CONTRO			OCK OPERATIONAL? N
EXH AIR DMPR CONTRO		D COMMON TIME OF	T. C. M. C. I. C. C. C. C. C. C. C. C. C. C. C. C. C.
EXITAIN DIM N CONTING	L: [N]		
OTHER CONTROLS			 1

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94

PREPARED BY: JM/AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER	7856	BOILER	RM LOCATION:	MER	
BOILER UNIT		·			
— SOURCE OF BLDG I		R SERVES AREA OR S	ERVICE:		
BOILER		CONVERT	ER		THE TABLE IA
BOILER TAG	BLR-1	CONVERTER			 .
BOILER TYPE				The state of the s	
FUEL TYPE	NAT. GAS	CONV HT SO	URCE:		
CENTRAL PLAN	T DIRECT				
NAMEPLATE		% AREA HEATED B	Y BB RADIATION		17
BOILER MFG: PAWNE	E	BLR CAP OUT	PUT (BTUH):	6,900,000	
UNIT MODEL: A-250		BLR CAP IN		8,625,000	
COMMENTS:					
SCHEDULE					
DAYS SCHEDULE NO: SCHEDULE COMMENTS:			MONTH SECHE	OULE NO:	3
SU			SAT:		=
PRES START: PRES STOP:	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	$\frac{0}{4} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	<u>0</u> 24		1
REQ START:		$\frac{4}{0} = \frac{24}{0} = \frac{24}{0} = \frac{24}{0}$	0		
REQ STOP:	24 24 24 2	4 24 24	24		!
MONTHS JAN: FEE	B: MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT:	NOV: DEC:	
ON:					_
CONTROLS					
TYPE OF BLR O OPERATING TYPE OF BURNER O	SETPOINT: 0 [DEG F or PSIG	RESET CONTR	ROLS: N	
CONTROLS C	OMMENTS:				:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/10/94

PREPARED BY: JM/AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NU	MBER: 7	7856				BOILER F	RM LOCA	ATION:	MEZZ		
BOILER UN	1IT										
	21 22 115 1		BLR/CON	IVERTER S	SERVES AR	EA OR SE	RVICE:	BB RAD	NOITAIC		
SOURCE OF	BLDG HEA	\ I									
☐ BOILE	<u>:R</u>					ONVERTE					. ,
	R TAG: 🚆					NVERTER		V-1			
BOILER						VERTER 1	-	ти то нт	HW		
FUEL	. TYPE:				CON	V HT SOL	JRCE:				
CENTRAL	PLANT D	IRECT									
NAMEPLAT	ΓΕ				% AREA HE	EATED BY	BB RAD	NOITAICN:			17
BOILER MFG:					BLR C	AP OUTP	UT (BTU	H):		(0
UNIT MODEL:					BLF	CAP INP	UT (BTU	H):		(0
COMMENTS:											
SCHEDULE	-										
DAYS SCHEDU SCHEDULE COMM	=	23					MONTH	SECHE	ULE NO:		1
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START:	0	0	0	0	0	0	0				1
PRES STOP:	24	= 24	24	24	24	24	<u>24</u> 6				
REQ START: REQ STOP:	24	== <u>5</u>	24	<u>5</u> 24	<u>5</u> =	<u>5</u> 	24				
REQ 310F.	24										
MONTHS JAN:	FEB:	MAR:	APR:	MAY: JU	UN: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	\boxtimes	\boxtimes	\boxtimes					\boxtimes	\boxtimes		
CONTROL	S										
TYPE OF	BLR CON	ITROLS:	PNEUM	ATIC	<u> </u>		RESE	T CONT	ROLS: [N	
OPER	ATING SE	TPOINT:		0 DE	G F or PSIG	;			_		
TYPE OF BUI	RNER CON	ITROLS:									
CONTR	ROLS COM	IMENTS:									
HW PUMP											
PUMP TAG:	1		PUM	P HP:	1		_	-	. ELECTI	RICAL	
DI IMP SERVICE:	HW PUL	/IP		i		PUI	MP MODI	EL:			1

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/10/94

PREPARED BY: JM/AJN/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

		BLDG NAME	: ENL PERS DIN			
REF. UNIT NUMBER/TAG	: CH-1		LOCATION	(MER#):	MER	
			AHU'S S	ERVED:	AHU-1, 2	
UNIT	TYPE RECIPROCA	TING WITH AIR	COOLED CONDENS	NG UNIT		
NAMEPLATE						
CHILLER MFG:	TSI		TOWER MFG	MCQUA	Y PERTE	X
CHILLER MODEL:	SC2CD80S		# OF TOWER FANS			6
CHILLER SERIAL NO:	7995-4		TOWER FAN V			208
CHILLER V:	20	08	TOWER FAN AMPS			25
CHILLER AMPS:	1:	35	TOWER FAN HP			1:
CHILLER PH:		3				
CHILLER CAP (TONS):		71				
COMMENTS:	<u> </u>					
SCHEDULE						
DAYS SCHEDULE	NO: 23		MONTHS SCHED	ULE NO:	2	
SCHEDULE COMME	NTS:					
SUN	: MON: TUE:	WED: THU	IR: FRI: SAT			
	0 0	0	0 0 0	-		:
				:		:
PRES STOP: 24	4 24 24	24	24 24 24			:
PRES STOP: 24	4 24 24 5 5 5	. 5				:
PRES STOP: 24 REQ START: 6 REQ STOP: 24	4 24 24 6 5 5 4 24 24	24 . 5 24	24 24 24 5 5 6 24 24 24	=		:
PRES STOP: 224 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB:	4 24 24 6 5 5 4 24 24	. 5	24 24 24 5 5 6	=	NOV:	DEC:
PRES STOP: 24 REQ START: 6 REQ STOP: 24	4 24 24 6 5 5 4 24 24	24 . 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SE	P: OCT:	NOV:	DEC:
PRES STOP: 22 REQ START: 6 REQ STOP: 22 MONTHS JAN: FEB: ON:	4 24 24 5 5 5 4 24 24 MAR: APR: I	24 . 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24	=		
PRES STOP: 22 REQ START: 6 REQ STOP: 22 MONTHS JAN: FEB: ON:	4 24 24 5 5 5 4 24 24 MAR: APR: I	24 . 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SE	P: OCT:		
PRES STOP: 22 REQ START: 6 REQ STOP: 22 MONTHS JAN: FEB: ON: CONTROLS	4 24 24 5 5 5 4 24 24 MAR: APR: I	24 . 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SE	P: OCT:		
PRES STOP: 22 REQ START: 6 REQ STOP: 22 MONTHS JAN: FEB: ON:	4 24 24 5 5 5 4 24 24 MAR: APR: I	24 . 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SE	P: OCT:		
PRES STOP: 22 REQ START: 6 REQ STOP: 22 MONTHS JAN: FEB: ON: CONTROLS	4 24 24 65 5 5 4 24 24 24	24 . 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SE	⊝: ост:		
PRES STOP: 24 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONTR	### 24 24 24 24 24 24 24 24 24 24 24 24 24	24 . 5 24 MAY: JUN: ⊠ ⊠	24 24 24 5 5 6 24 24 24 JUL: AUG: SEI □ □ □	P: OCT:		
PRES STOP: 22 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON:	### 24 24 24 24 24 24 24 24 24 24 24 24 24	24 5 24 MAY: JUN: ⊠ ⊠	24 24 24 5 5 6 24 24 24 JUL: AUG: SEI	Р: ОСТ: Т:		0
PRES STOP: 22 REQ START: 6 REQ STOP: 22 MONTHS JAN: FEB: ON: □ □ CONTROLS TYPE OF CONTROLS CWS SETE CWR SETE PRESS LE	### 24 24 24 24 24 24 24 24 24 24 24 24 24	24	24 24 24 5 5 6 24 24 24 JUL: AUG: SEI ☑ ☑ ☑ CNWS SETPOIN CNWR SETPOIN CNWR SETPOIN CNWR SETPOIN	P: OCT:		0
PRES STOP: 22 REQ START: 6 REQ STOP: 22 MONTHS JAN: FEB: ON:	## 24 24 24 24 24 24 24 24 24 24 24 24 24	24 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SEI CNWS SETPOIN CNWR SETPOIN CNWR SETPOIN : N OTHER II : N	Р: ОСТ: Т:		0
PRES STOP: 22 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON:	MAR: APR: I MAR: APR: I COINT: COIN	24	24 24 24 5 5 6 24 24 24 JUL: AUG: SEI CNWS SETPOIN CNWR SETPOIN CNWR SETPOIN : N OTHER II : N	Р: ОСТ: Т:		0
PRES STOP: 22 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON:	A 24 24 B 5 5 5 A 24 24 MAR: APR: I WAR: APR: I COINT:	24 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SEI CNWS SETPOIN CNWR SETPOIN CNWR SETPOIN : N OTHER II : N	Р: ОСТ: Т:		0
PRES STOP: 22 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON:	A 24 24 B 5 5 5 A 24 24 MAR: APR: I WAR: APR: I COINT:	24 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SEI CNWS SETPOIN CNWR SETPOIN CNWR SETPOIN : N OTHER II : N	Р: ОСТ: Т:		0
PRES STOP: 22 REQ START: 6 REQ STOP: 24 MONTHS JAN: FEB: ON:	A 24 24 B 5 5 5 A 24 24 MAR: APR: I WAR: APR: I COINT:	24 5 24 MAY: JUN:	24 24 24 5 5 6 24 24 24 JUL: AUG: SEI CNWS SETPOIN CNWR SETPOIN CNWR SETPOIN : N OTHER II : N	T: NDICATIO	RS:	0

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7856

FILE:

AHU NO.:	AHU-1	LOCATION	GUNIT - HVAC U					
HU TYPE:	SZ	MFG.:	TRANE	VIL. (MODEL:	L14		
SZ - Single Zone		ting & Vntltng		n Coil (Indicate 2			e)	
MZ - Mulitzone		able Air Vol.	1	Reheat System			,	
DD - Dual Duct	UH - Unit I			duction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X*	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
			S INTERLOCKED. PNI				DPR-ACT = Dampe	r Actuator
COMMENTS:			WITCH ON O. A DOES		NOLO.		RP-ACT = Replace	
	IVIIIIIIIVI	FUSITION 3	WITCH ON O. A DOLO	SNOT WORK			Tr Act = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:	1000	1010. 7	1.12.0102.	10,42	******			
JUIVIIVIEIY I 3.								
SUPPLY AIR FAN	JOK: X	IREPLACE	FAN BEARINGS:	COMMEN	JTS:			
SUPPLY FAN MOTOR	IOK: X	REPLACE		COMMEN		BEARING	S MAKING NO	SF
		OK:	ICOMMENTS:	COMMEN	110.	DEAMING	O MARINO NO	
NLET VANES	N/A: X		FAN BEARINGS:	COMMEN	ITC.	N/A		
RETURN AIR FAN	OK:							
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	115:	N/A		
COMMENTS:	SUPPLY F	AN MOTOR	5 HP MARATHON					
	16.10	Tork V	Joseph Age	TO175	ECNITI VIIV	MOK. V	IDD ACT.	ישם מחי
	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace E	RP-BD: RP-BD: RP-BD:
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: X	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace E	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY: BLDG: 7856 FILE: 7856.XLS AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS AHU NO.: LOCATION (Rm) MEZZ MER AHU-2 AHU TYPE: SZ MFG.: TRANE MODEL: L14 SZ - Single Zone H&V - Heating & Vntltng. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe) MZ - Mulitzone VAV - Variable Air Vol. RHT - Reheat System DD - Dual Duct UH - Unit Heater IND - Induction System O.A. DAMPER N/A: OK: X REPLACE: SIZE: RP- ACT: DPR-ACT OK: X * R.A. DAMPER N/A: OK: X REPLACE: SIZE: DPR-ACT OK: RP- ACT: E.A. DAMPER N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: F. & B. DAMPER N/A: REPLACE: SIZE: OK: RP- ACT: OK: DPR-ACT ZONE DAMPER N/A: OK: REPLACE: SIZE: OK: DPR-ACT RP- ACT: COMMENTS: * OA & RA DAMPERS INTERLOCKED. DPR-ACT = Damper Actuator SINGLE SETPOINT T-STATS ON ALL T-STATS - PNEUMATIC. RP-ACT = Replace Actuator FILTER SECTION N/A: OK: X REPLACE: SIZE: COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: RETURN AIR FAN REPLACE FAN BEARINGS OK: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COMMENTS: COOLING COIL OK: X REPLACE: SIZE: N/A: CNTLVLV RP-ACT: RP-BD: OK: X HEATING COIL N/A: RP- ACT: OK: X REPLACE: SIZE: CNTLVLV OK: X RP-BD: PREHEAT COIL N/A: OK: REPLACE: SIZE: CNTLVLV RP-BD: OK: RP- ACT: REHEAT COIL N/A: OK: REPLACE: SIZE: CNTLVLV OK: RP-BD: RP-ACT: COMMENTS: RP-ACT = Replace Actuator RP-BD = Replace Body AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: ESTIMATED QUANTITY: 4'OF 1-1/2" ON CONDENSATE OK: MISSING: X DUCT INSULATION N/A: OK: X ESTIMATED QUANTITY: MISSING: COMMENTS: DAMAGED VALVE INSULATION ON CHW. - 3' OF 8" INSUL.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7856

FILE:

AHU NO.:	MAU-1	LOCATIO	GUNIT - HVAC U	N MEZZ				
AHU TYPE:	MAU	MFG.:	TRANE TORRIVENT		MODEL:	T-10		
SZ - Single Zone		ting & Vntltng		n Coil (Indicate 2)	
MZ - Mulitzone	1	able Air Vol.		Reheat System			,	
DD - Dual Duct	:UH - Unit l			duction System				
O.A. DAMPER	N/A:	OK: X	IREPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	FACE AND						DPR-ACT = Dampe	r Actuator
			LW MENT			· · · · · · · · · · · · · · · · · · ·	RP-ACT = Replace	Actuator
- M	- 10	···=•	M. M			yn.		
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:			<u> </u>	
COMMENTS:	STEAM C			1				
				, .				
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:	MARATH	ON ELECTRIC	1-1/2 HP
SUPPLY FAN MOTOR	OK: X			COMMEN				
INLET VANES	N/A: X	OK:	COMMENTS:			**		
		10.0	100					
		REPLACE	FAN BEARINGS:	ICOMMEN	TS:	N/A		
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN		N/A		
RETURN AIR FAN RETURN FAN MOTOR		REPLACE REPLACE		COMMEN		N/A		
RETURN AIR FAN RETURN FAN MOTOR	OK:					N/A		
RETURN AIR FAN RETURN FAN MOTOR	OK:					N/A		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK: OK:	REPLACE		COMMEN	TS:		IRP- ACT	IRP-RD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK: OK: N/A: X	REPLACE	REPLACE:	COMMEN SIZE:	TS:	OK:	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK: N/A: X N/A:	REPLACE OK: OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: OK: X	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: X N/A: N/A: X	OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A:	REPLACE OK: OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A: N/A: X	OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A: N/A: X	OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: X N/A: N/A: X	OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	OK: OK: N/A: X N/A: X N/A: X N/A: X	OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	OK: OK:	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: X N/A: X N/A: X N/A: X	OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	OK: OK:	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	OK: OK:	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	OK: OK:	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace E	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	OK: OK:	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7856

FILE:

HU TYPE:				G UNIT - HVAC U		JR2FKA	IIONS		····
National Company	AHU NO.:	MAU-2		` '					
MZ - Mulitzone									
DD - Dual Duct	_		-		•	2P for 2 Pipe or	4P for 4 Pipe	e)	
O.A. DAMPER N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X RP-ACT: R.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: X RP-ACT: F. B. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: X RP-ACT: ZONE DAMPER N/A: X OK: X REPLACE: SIZE: DPR-ACT OK: X RP-ACT: ZONE DAMPER N/A: X OK: X REPLACE: SIZE: DPR-ACT OK: X RP-ACT: ZONE DAMPER N/A: X OK: X REPLACE: SIZE: DPR-ACT OK: X RP-ACT: ZOMMENTS: LARGE HOLES GUT IN INTAKE DUCT TO TAKE AIR FROM MEZZANINE AREA OPR-ACT - REPLACE: OK: X RP-ACT: DPR-ACT - OK: X RP-ACT: RP-ACT: DPR-ACT - OK: X RP-ACT: DPR-ACT - OK: X RP-ACT: RP-ACT: DPR-ACT - OK: X RP-ACT: RP-ACT: DPR-ACT - OK: X RP-ACT: DPR-ACT - OK: X RP-ACT: RPR-ACT: DPR-ACT - OK: X RPR-ACT: DPR-ACT - OK: X					•				
R.A. DAMPER									.,
E.A. DAMPER							El		
F. & B. DAMPER N/A:			1				ii .		
ZONE DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT:		N/A: X			SIZE:		- 11		
COMMENTS: LARGE HOLES CUT IN INTAKE DUCT TO TAKE AIR FROM MEZZANINE AREA -90% AIR FROM MEZZANINE, 10% FROM OUTSIDE. RP.ACT = Replace A RP.ACT = Replace A FILTER SECTION N/A: OK: X REPLACE: SIZE:							Hi .		
-90% AIR FROM MEZZANINE, 10% FROM OUTSIDE. RPACT = Replace A FILTER SECTION N/A: OK: X REPLACE: SIZE: COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: COMMENTS: UNIT DISSABLED/ MOTOR GONE/ HOLES TORCHED IN UNIT COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-ACT = Replace A AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: COMMENTS: SIZE: CNTLVLV OK: RP-BD-Replace A AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: COMMENTS: SIZE: CNTLVLV OK: RP-BD-Replace A AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE	ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
FILTER SECTION N/A: OK: X REPLACE: SIZE: COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: RETURN FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: COMMENTS: UNIT DISSABLED/ MOTOR GONE/ HOLES TORCHED IN UNIT COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVV OK: RP-ACT: RETURN FAN MOTOR N/A: X OK: REPLACE: SIZE: CNTLVV OK: RP-ACT: RETURN FAN MOTOR N/A: X OK: REPLACE: SIZE: CNTLVV OK: RP-ACT: RETURN FAN MOTOR N/A: X OK: REPLACE: SIZE: CNTLVV OK: RP-ACT: RETURN FAN MOTOR N/A: X OK: REPLACE: SIZE: CNTLVV OK: RP-ACT: RP-ACT = Replace B: AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: CNTLVIV OK: RP-ACT RP-ACT = Replace B: SIZE: CNTLVIV OK: RP-ACT RP-ACT = Replace B: SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = Replace B: SIZE: CNTLVIV OK: RP-ACT RP-ACT = Replace B: SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE: CNTLVIV OK: RP-ACT RP-ACT = SIZE:	COMMENTS:	LARGE H	OLES CUT IN	INTAKE DUCT TO TAK	E AIR FROM ME	ZZANINE ARE	A	DPR-ACT = Dampi	er Actuator
COMMENTS: SUPPLY AIR FAN		~90% AIR	FROM MEZZ	ANINE, 10% FROM OU	TSIDE.			RP-ACT = Replace	Actuator
COMMENTS: SUPPLY AIR FAN									
SUPPLY FAN MOTOR	FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
SUPPLY FAN MOTOR	COMMENTS:								
SUPPLY FAN MOTOR									
N/A: X	SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	TS:			
RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: COMMENTS: UNIT DISSABLED/ MOTOR GONE/ HOLES TORCHED IN UNIT COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: X RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE: CNTLVLV OK: RP-ACT: REPLACT: SIZE:	SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
RETURN FAN MOTOR OK: REPLACE: COMMENTS: COMMENTS: UNIT DISSABLED/ MOTOR GONE/ HOLES TORCHED IN UNIT COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: HEATING COIL N/A: OK: X REPLACE: SIZE: CNTLVLV OK: RP- ACT: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-ACT = Replace A RP-BD = Replace B AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: RP-BD = Replace B OK: REPLACE: SIZE: COMMENTS: RP-BD = Replace B OK: REPLACE: SIZE: COMMENTS: RP-BD = Replace B OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE	INLET VANES	N/A: X	OK:	COMMENTS:					
COMMENTS: UNIT DISSABLED/ MOTOR GONE/ HOLES TORCHED IN UNIT COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: HEATING COIL N/A: OK: X REPLACE: SIZE: CNTLVLV OK: X RP-ACT: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-ACT = Replace A RP-BD = Replace B: RP-BD = Replace B: AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE: S	RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: X RP-ACT: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: X RP-ACT: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-ACT: RP-ACT: RP-BD = Replace B AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: RP-BD = Replace B OMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: S	RETURN FAN MOTOR	OK:	REPLACE		COMMEN	ITS:			
COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: X RP-ACT: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: X RP-ACT: PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-ACT: RP-ACT: RP-BD = Replace B AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: RP-BD = Replace B OMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: S					RCHED IN UNIT				
HEATING COIL									
HEATING COIL PREHEAT COIL N/A:									·
PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: COMMENTS: RP-BD = Replace & RP-BD = R				IDEDLACE:	ISIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-ACT:	COOLING COIL	N/A: X	OK:	INLFLACE.				DD ACT	RP-BD
RP-ACT = Replace A RP-BD = Replace B AHU PUMP MOTOR		11		1		CNTLVLV	IOK: X	IRP-ACI.	
AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZ	HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:			1	RP-BD
AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZ	HEATING COIL PREHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD RP-BD
AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: X ESTIMATED QUANTITY: 5' @ 2" 12' @	HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD
AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: X ESTIMATED QUANTITY: 5' @ 2" 12' @	HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD Actuator
AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: X ESTIMATED QUANTITY: 5' @ 2" 12' @	HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD Actuator
AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: X ESTIMATED QUANTITY: 5' @ 2" 12' @	HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD Actuator
COMMENTS: PIPE INSULATION N/A: OK: MISSING: X ESTIMATED QUANTITY: 5' @ 2' 12' @	HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD Actuator
PIPE INSULATION N/A: OK: MISSING: X ESTIMATED QUANTITY: 5' @ 2" 12' @	HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD Actuator
	HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD Actuator
	HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD Actuator
	HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD Actuator
	HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP- ACT: RP- ACT: RP-ACT = Replace RP-8D = Replace	RP-BD Actuator Body
	HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP-ACT = Replace RP-8D = Replace	RP-BD Actuator Body
	TING COIL HEAT COIL EAT COIL IMENTS: PUMP MOTOR PUMP SEALS IMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP-ACT = Replace RP-8D = Replace	RP-BD Actuator Body

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7856

FILE:

E: 7856.XLS

			BLDG:	7856			FILE:	/856	XLS
	REFRIGE	RATION E	QUIPMEN	T - HVAC	UPGRA	DE OBSE	RVATI	ONS	
CHILLER / EQUIP. NO.		CH-1	LOCATION (RM)	MER		SC2CD7	0	
REFG. EQUIP. TYPE:		R-ACCU		TSI		MODEL:	(10AD76		
C-WCT = Centrifugal w/ \	Nater Side Co	ooling Tower		R-ACCU = R	eciprocating	w/ Air Cooled	Condensi	ng Unit	
R-WCT = Reciprocating v	w/ Water Side	Cooling Tower		ASB-WCT =	Absorption v	w/ Water Side	Cooling To	wer	
ACCU = Air Cooled Cond	lensing Unit			CT = Cooling	Tower				
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:		·		
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:				
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:				
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:				
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:	6 FANS @	1 HR EACH	+	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:				
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:				
COMMENTS:	SPLIT SY	STEM - ACCU	OUTSIDE/ CO	MPRESSOR	INSIDE				
COOLING TOWER	N/A: X	OK:	REPLACE:		SIZE:				
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:				
COMMENTS:	50' OF 1-	-1/4" INSUL. MI	SSING ON LIQ	UID LINES					
***************************************					······································				
CHILLER INSUL.	N/A:	OK: X	MISSING:	······	ESTIMATE	D QUANTITY:			
CHW PIPE INSUL.	N/A:	OK:	MISSING:	Χ	ESTIMATE	D QUANTITY:		15' - 4	4"
COMMENTS:	CHW PUI	MP NEEDS INS	SULATION	····					
					,				

CHW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:	5 HP CENT	URY E-F	LUS. *	
CHW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:	•		•	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:				
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:				
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:				
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:		-		
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:				
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:				
COMMENTS:	* MOTOR	AND PUMP N	OT BOLTED D	OWN - HANG	ING IN AIR	- PIPE IS SUF	PORTING	ALL	<u></u>
		(NEW MOTO							
			,						
									· · · · · · · · · · · · · · · · · · ·
			·						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG: **7856** FILE: 7856.XLS

LER &	CONVE	RTER - HVAC	UPGRADE OBSERVATIONS
VO.	BLR-1	LOCATION (RM)	MER
	STM	MFG.: AJAX	MODEL:
		MFG.:	MODEL:
STM/HW	/ - Steam t	o Hot Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HTHW/F	IW - High	Temp. HW to HW C	v. DHW - Domestic Hot Water Convertor
ATMOS	PHERIC:	POWER: 5HP	OK: X REPLACE:
		REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:
N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
N/A:	OK:	MISSING: X	ESTIMATED QUANTITY: 8' OF 4"
LARGE (CONDENSA	ATE TANK UNINSUL	ATED AT 8' x 3' DIA
	OK:	REPLACE:	SIZE:
			SIZE:
BLOWER	DAMPER	ACTANTOR DISSAE	BLED ON BOILER
		77.57.415.41	
	OK:	REPLACE:	SIZE:
N/A: X	OK:	REPLACE:	SIZE:

N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
			. , , , , , , , , , , , , , , , , , , ,
	NO. STM/HW HTHW/H ATMOSF N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: X N/A: X N/A: X	NO. BLR-1 STM STM/HW - Steam the HTHW/HW - High Mark Mark Mark Mark Mark Mark Mark Mark	STM MFG.: AJAX MFG.: STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW Co ATMOSPHERIC: POWER: 5HP N/A: X OK: REPLACE: N/A: X OK: MISSING: N/A: OK: MISSING: X LARGE CONDENSATE TANK UNINSUL N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7856

FILE:

	BOILE	R & CON	IVERTER - HVAC	UPGRADE OBSERVATIONS	
BOILER/CONVERTER NO).	CV-1	LOCATION (RM)	KITCHEN MEZZ	
BOILER TYPE:			MFG.:	MODEL:	
CONVERTER TYPE:		STM/HW	MFG.:	MODEL:	
STM - Steam			t Water Conv.	HTHW/STM - High Temp HW to Steam Convertor	
HW - Hot Water			o. HW to HW Cv.	DHW - Domestic Hot Water Convertor	
BOILER BURNER	ATMOSPI		POWER:	OK: REPLACE:	
COMMENTS:		S ON CONV			
	DOMESTI	C HOT WATE	ER		
			Market To Table		
BLR PUMP MOTOR	N/A: X	IOK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:		ALVE LEAKI		1	
			- Turonyo	LEGIMATED QUANTITY.	
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY: [ESTIMATED QUANTITY:	
			IMICCINIC:	IECHMATELIANIANIA	
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED GOARTHT.	
PIPE INSULATION COMMENTS:	N/A: X	ок:	IMISSING.	ESTIMATED QUANTITY.	
PIPE INSULATION	N/A: X	OK:	INIOSINO.	ESTIMATED QUANTITY.	
PIPE INSULATION COMMENTS:					
PIPE INSULATION COMMENTS: HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X N/A: X	OK: OK:	REPLACE: REPLACE:	SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X N/A: N/A: N/A:	OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: X N/A: X N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS HW PUMP SEALS	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: MISSING:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR	N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY:

CWW AJM

BLDG:

7856

FILE:

				UPGRADE OBSERVATION	
BOILER/CONVERTER NO	,	CV-2	LOCATION (RM)	LOCKER ROOM MEZZ	
BOILER TYPE:			MFG.:	MODEL:	
CONVERTER TYPE:	STM/HW		MFG.:	MODEL:	
STM - Steam			t Water Conv.	HTHW/STM - High Temp HW to	
HW - Hot Water			o. HW to HW Cv.	DHW - Domestic Hot Water Co	
BOILER BURNER	ATMOSPI		POWER:	OK: REF	PLACE:
COMMENTS:	DOMESTI	C WATER			
			A A A A A A A A A A A A A A A A A A A		
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:	1/12 HP R	ECIRCULAT	NG PUMP		
***************************************		S ON CONV			
BLR INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:					
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR		1	1	,	
HW PUMP MOTOR HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	JOK:	REPLACE:	SIZE:	
	N/A: X	Ток:	REPLACE:	SIZE:	
HW PUMP SEALS	N/A: X	JOK:	REPLACE:	SIZE:	
HW PUMP SEALS COMMENTS:					
HW PUMP SEALS	N/A: X N/A: N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A:				
HW PUMP SEALS COMMENTS: CV PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A:	OK: X	REPLACE: REPLACE:	SIZE: SIZE:	
HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS: CV INSULATION	N/A: N/A: N/A:	OK: X OK: X	REPLACE: REPLACE:	SIZE: SIZE: ESTIMATED QUANTITY:	28' @ 2 4/2"
HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A:	OK: X	REPLACE: REPLACE:	SIZE: SIZE:	28' @ 2-1/2"

${\bf E}\ {\bf M}\ {\bf C}$ ENGINEERS, INC.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7856

FILE:

MFG.: MODEL: SCA63-2-1					UPGRADE OBSERVATION	ONO
STM-Steam).	CV-3	LOCATION (RM)	LOCKER MEZZ	
STM - Steam						
HVI - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: OK: REPLACE: COMMENTS: 6" x 3" LONG BER PUMP MOTOR N/A: X OK: REPLACE: SIZE: BER PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BER INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: PERIMETER RAD HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY: 8' OF 2-1/2' CV INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY: 8' OF 2-1/2'					i i	
BOILER BURNER ATMOSPHERIC: POWER: OK: REPLACE: COMMENTS: 6" x 3" LONG BER PUMP MOTOR N/A: X OK: REPLACE: SIZE: BER PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE: BER RUMP SEALS N/A: X OK: REPLACE: SIZE: BER RUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: PERIMETER RAD HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV INSULATION N/A: OK: X REPLACE: SIZE: CV INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY: 8" OF 2-1/2"					· ·	
COMMENTS: 6° x 3° LONG BER PUMP MOTOR N/A; X OK: REPLACE: SIZE: BER PUMP SEALS N/A; X OK: REPLACE: SIZE: COMMENTS: BER INSULATION N/A; X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A; X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: PERIMETER RAD HW PUMP MOTOR N/A; OK: REPLACE: SIZE: HW PUMP MOTOR N/A; OK: REPLACE: SIZE: HW PUMP SEALS N/A; OK: REPLACE: SIZE: HW PUMP SEALS N/A; OK: REPLACE: SIZE: HW PUMP MOTOR N/A; OK: REPLACE: SIZE: HW PUMP MOTOR N/A; OK: REPLACE: SIZE: HW PUMP SEALS N/A; OK: REPLACE: SIZE: HW PUMP SEALS N/A; OK: REPLACE: SIZE: HW PUMP MOTOR N/A; OK: REPLACE: SIZE: HW PUMP SEALS N/A; OK: REPLACE: SIZE: HW PUMP SEALS N/A; OK: REPLACE: SIZE: HW PUMP SEALS N/A; OK: REPLACE: SIZE: HW PUMP SEALS N/A; OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A; OK: X REPLACE: SIZE: 3/4 HP CV PUMP SEALS N/A; OK: X REPLACE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZ						
BLR PUMP MOTOR BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION NA: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION NA: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION NA: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: PERIMETER RAD HIW PUMP MOTOR NA: OK: REPLACE: SIZE: HIW PUMP SEALS NA: OK: REPLACE: SIZE: HIW PUMP SEALS NA: OK: REPLACE: SIZE: HIW PUMP SEALS NA: OK: REPLACE: SIZE: HIW PUMP MOTOR NA: OK: REPLACE: SIZE: HIW PUMP MOTOR NA: OK: REPLACE: SIZE: HIW PUMP MOTOR NA: OK: REPLACE: SIZE: HIW PUMP MOTOR NA: OK: REPLACE: SIZE: HIW PUMP SEALS NA: OK: REPLACE: SIZE: HIW PUMP SEALS NA: OK: REPLACE: SIZE: COMMENTS: MAINAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR NA: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP SEALS NA: OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE: SI				POWER:	OK: JREP	LACE:
BLR PDMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: PERIMETER RAD HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS:	6" x 3' LON	√G				
BLR PDMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: PERIMETER RAD HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: OK: X REPLACE: SIZE:			·			
BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: PERIMETER RAD HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: SIZE: 3/4 HP CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE: S						
BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: PERIMETER RAD HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: SIZE: 3/4 HP CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: SIZE: SIZE: SIZE: SIZE: COMMENTS: SIZE: S	D DUMP MOTOR	761/A. V	TOV:	IDEDI ACE:	ICI7E	
COMMENTS: BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:		III		l .		
BLR INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:			Tor.	INCI LAGE.	JOIZE.	
PIPE INSULATION	POININEN 19:					
PIPE INSULATION						
PIPE INSULATION	RER INSULATION	IN/A· X	IOK.	IMISSING:	TESTIMATED QUANTITY:	
COMMENTS: PERIMETER RAD HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: SIZE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZ					<u> </u>	
HW PUMP MOTOR				miconto.	2011111122	
HW PUMP SEALS	JOHNIERTO.	1 2 1 1 1 1 1	21(10)2			
HW PUMP SEALS						
HW PUMP SEALS	LIM DUMP MOTOR	161/Δ.	IOK:	IREDI ACE:	ISI7F:	
HW PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: SIZE: SIZE: SIZE: COMMENTS: SIZE: SIZE: COMMENTS: SIZE: SI						
HW PUMP SEALS			1			
HW PUMP MOTOR		11		<u> </u>		
HW PUMP SEALS					ISIZE:	
HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR CV PUMP SEALS N/A: OK: X REPLACE: SIZE: 3/4 HP CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"						
HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"						
COMMENTS: MANUAL SHUT OFF VALVES AND MANUAL BALANCING VALVES ON PERIMETER RAD. CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS		IOK:	REPLACE:		
CV PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS HW PUMP MOTOR	N/A:			SIZE:	
CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:	R RAD.
CV PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:	R RAD.
CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:	R RAD.
CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: MANUAL	OK: SHUT OFF V	REPLACE: ALVES AND MANUAL BA	SIZE: SIZE: ALANCING VALVES ON PERIMETE	R RAD.
CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR	N/A: N/A: MANUAL	OK: SHUT OFF V	REPLACE: ALVES AND MANUAL BA	SIZE: SIZE: ALANCING VALVES ON PERIMETE SIZE: 3/4 HP	R RAD.
CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: MANUAL	OK: SHUT OFF V	REPLACE: ALVES AND MANUAL BA	SIZE: SIZE: ALANCING VALVES ON PERIMETE SIZE: 3/4 HP	R RAD.
CV PIPE INSUL. N/A: OK: MISSING: X ESTIMATED QUANTITY: 8' OF 2-1/2"	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: MANUAL	OK: SHUT OFF V	REPLACE: ALVES AND MANUAL BA	SIZE: SIZE: ALANCING VALVES ON PERIMETE SIZE: 3/4 HP	R RAD.
OTTHE MODE.	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: MANUAL	OK: SHUT OFF V	REPLACE: ALVES AND MANUAL BA	SIZE: SIZE: ALANCING VALVES ON PERIMETE SIZE: 3/4 HP	R RAD.
	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A: MANUAL MANUAL N/A: N/A:	OK: SHUT OFF V OK: X OK: X	REPLACE: ALVES AND MANUAL BA REPLACE: REPLACE:	SIZE: SIZE: SIZE: ALANCING VALVES ON PERIMETE SIZE: 3/4 HP SIZE:	R RAD.
	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS: CV PUMP SEALS COMMENTS:	N/A: N/A: MANUAL N/A: N/A: N/A:	OK: SHUT OFF V OK: X OK: X	REPLACE: ALVES AND MANUAL BA REPLACE: REPLACE: MISSING:	SIZE: SIZE: ALANCING VALVES ON PERIMETE SIZE: SIZE: 3/4 HP SIZE:	
	HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS: CV PUMP SEALS COMMENTS:	N/A: N/A: MANUAL N/A: N/A: N/A:	OK: SHUT OFF V OK: X OK: X	REPLACE: ALVES AND MANUAL BA REPLACE: REPLACE: MISSING:	SIZE: SIZE: ALANCING VALVES ON PERIMETE SIZE: SIZE: 3/4 HP SIZE:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0723

GAS METER: N SUSPECT ACM: Y

BLDG NAME: MNT HANGAR COMB

ELECTRIC METER: N

0

CONDITIONED SQFT:

21,640

17

17

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

FRI: THUR: SAT: SUN: MON: TUE: WED: 0 0 0 0 0 0 0 24 24 24 24 24 24 24 7 7 7 7 7 0 0

17

17

REMARKS:

PRES START:

PRES STOP:

REQ START:

Suspect ACM located on heating pipe fittings

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94

LOCATION: FT. RILEY, KS PREPARED BY: JM

AIR H	ANDLING U	NII SURVE	A ORSEKA	AHONS	
BUILDING NUMBER AHU NUMBER		AHU L	OCATION: MER		
REFRIG SYS # SRVNG A		SERVE % OF BLDG AREA H		R. MAINT. SHOPS	10
AHU UNIT TYPE HEAT	ING AND VENTILATI	NG :	NUMBER O	F ZONES IF MZ (JNIT: 0
CFM-HTG: MIN %OA:	1,60 1		FM-CLG:	0 100	
NAMEPLATE					
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:	0.25	RET/	UNIT MODE RET/EXH FAN HI EXH FAN MTR MFO I FAN MTR MODE	P: G:	0
COILS					
Coil PREHEAT COIL: HEATING COIL: REHEAT COIL: HUMIDIFIER: COOLING COIL:	STEAM NONE NONE	M(odulating Valve?		
DAY SCHEDULE NO: SCHEDULE COMMENTS:	2		MONT	H SCHEDULE NO	D:
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON: TUE: 0 0 24 24 7 7 17 17	WED: THUR: 0 0 24 24 7 7 17 17	FRI: SAT: 0 0 24 24 7 0 17 0		· · · · · · · · · · · · · · · · · · ·
MONTHS JAN: FEB: ON:	MAR: APR: MA		AUG: SEP:	OCT: NOV:	DEC:
CONTROLS		<u> </u>			
TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U		0	THERMOSTAT THOT DECK DOCOLD DECK DOCOLD DECK DOCOLD DICK DICK DICK DICK DICK DICK DICK DIC	EG F:	0 0 0
PRESENT TEMP SUM PRESENT TEMP SUM U			R SETPOINT DES	CRIP:	0
MIN OA DMPR CONTROI MAX OA DMPR CONTROI RET AIR DMPR CONTROI EXH AIR DMPR CONTROI	L: Y ECONO	O AIR DMPR CONTRO OMIZER DB CONTRO OMIZER WB CONTRO	DL: N	MENT DEMAND L	TIME CLOCK: N
OTHER CONTROLS D					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

AIR HANDLING UNIT SU	JRVEY OBSERVATIONS
BUILDING NUMBER: 0723	AUILLOCATION: DAV
AHU NUMBER: UH-1	AHU LOCATION: BAY
REFRIG SYS # SRVNG AHU: NONE	SERVES AREA: BAY
% OF BLD	G AREA HEATED: 8
AHU UNIT TYPE UNIT HEATER	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: 740	CFM-CLG: 0
MIN %OA: 0	MAX %OA: 0
NAMEPLATE	
UNIT MFG: DUNHAM-BUSHCH	UNIT MODEL: VHU-10
SUPPLY FAN HP: 0.25	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: DAYTON	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: 5K907B	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	; <u> </u>
COOLING COIL: NONE	
SCHEDULE	
DAY SCHEDULE NO: 2	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: TH	HUR: FRI: SAT:
PRES START: 0 0 0 0	<u> </u>
PRES STOP: 24 24 24 24	24 24 24
REQ START: 0 7 7 7	7 0
REQ STOP: 0 17 17 17	17 0
MONTHS JAN: FEB: MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖾 🖾 🖾 🖾	
CONTROLS	· · · · · · · · · · · · · · · · · · ·
TYPE OF CONTROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC: 70	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC: 0	COLD DECK DEG F: 0
PRESENT TEMP SUM OCC: 70	MIXED AIR DEG F: 0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC: 0	OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXED AIR DMPR	R CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: N ECONOMIZER DE	CONTROL: N TIME CLOCK: N
RET AIR DMPR CONTROL: N ECONOMIZER WE	CONTROL: N TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/18/94
PREPARED BY: JM

BUILDING NUMBE	NAME OF TAXABLE PARTY OF TAXABLE PARTY.	-			
AHU NUMBE	R: <u>UH-2</u>	AHU LOC	ATION: BAY		
REFRIG SYS # SRVNG A		SERVES A			
	% (OF BLDG AREA HEA	TED:		8
AHU UNIT TYPE UNIT	HEATER		NUMBER O	F ZONES IF MZ	UNIT: 0
CFM-HTG:	740	CFM-	CLG:	0	
MIN %OA:	. 0	MAX 9	%OA:	0	
NAMEPLATE					
UNIT MFG:	DUNHAM-BUSCH		UNIT MODEL	.: VHU-10	
SUPPLY FAN HP:	ARCHING	RI	ET/EXH FAN HE		0
SUPPLY FAN MTR MFG:	DAYTON	RET/EXH	FAN MTR MFC	3:	
SUPPLY FAN MTR MODEL:	5K907B	RET/EXH FA	AN MTR MODEL		
COMMENTS:					
COILS					
Coil	Coil Type	Modu	lating Valve?		
PREHEAT COIL:	NONE				
HEATING COIL:					
REHEAT COIL:	NONE				
HUMIDIFIER:	NONE				
COOLING COIL:	NONE				
SCHEDULE					
DAY SCHEDULE NO:	2		MONT	SCHEDULE N	O: 3
SCHEDULE COMMENTS:					AND CONTRACTOR OF SALES
SUN:	MON: TUE: WE	ED: THUR: FR	I: SAT:		
PRES START: 0	0 0	0 0	0 0		
PRES STOP: 24	24 24	24 24 2	24 24		
REQ START: 0	7 7	7 7	7 0		
REQ STOP: 0	17 17	17 17 1	7 0		
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: A	UG: SEP:	OCT: NOV:	DEC:
ON: ☑ ☑			\boxtimes	\boxtimes	\boxtimes
CONTROLS					
TYPE OF CON	TROLS: ELECTRIC	Т	HERMOSTAT T	ļ	SETPOINT
PRESENT TEMP WINT	R OCC:	70	HOT DECK DI		0
PRESENT TEMP WINTR U	JNOCC:	0	COLD DECK D		0
PRESENT TEMP SU	M OCC	70 OTHER S	MIXED AIR DI SETPOINT DES		0
PRESENT TEMP SUM L			R SETPOINT DES		0
MIN OA DMPR CONTRO	L: N MIXED A	R DMPR CONTROL:	N IMPLE	MENT DEMAND	LIMIT CNTRLS?
MAX OA DMPR CONTRO		IZER DB CONTROL:	N		TIME CLOCK:
RET AIR DMPR CONTRO		ZER WB CONTROL:	N	TIME CLOCK	OPERATIONAL?
EXH AIR DMPR CONTRO	=	LLK HIS CONTROL.	<u></u>	Time OLOOK	OI EIGHTONAL!
OTHER CONTROLS	DESCR:		- ····		<u> </u>
					i

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94

PREPARED BY: JM LOCATION: FT. RILEY, KS

BUILDING NUMBE AHU NUMBE		AHU LOCATION	: BAY		
REFRIG SYS # SRVNG A	AHU: NONE	SERVES AREA:	BAY		
	% O	F BLDG AREA HEATED:		8	
AHU UNIT TYPE UNIT	HEATER	NU	MBER OF ZONE	ES IF MZ UNIT:	0
CFM-HTG	: 740	CFM-CLG:		0	
MIN %OA	:0	MAX %OA:		0	
NAMEPLATE					
UNIT MFG	: DUNHAM-BUSCH			U-10	
SUPPLY FAN HP	: 0.25		H FAN HP:	0	
SUPPLY FAN MTR MFG	: DAYTON	RET/EXH FAN			
SUPPLY FAN MTR MODEL COMMENTS		RET/EXH FAN MT	R MODEL:		
COILS	0.117		Value0		
Coil	Coil Type	Modulating	vaive?		
PREHEAT COIL	h	 			
HEATING COIL					
REHEAT COIL					
HUMIDIFIER COOLING COIL		H			
	, NONE				
SCHEDULE					····
DAY SCHEDULE NO:	2		MONTH SCH	DULE NO:	3
SCHEDULE COMMENTS:					
SUN:	MON: TUE: WED	D: THUR: FRI:	SAT:		_
PRES START: 0	0 0	0 0 0	0		
PRES STOP: 24	24 24 2	24 24 24	24		
REQ START: 0	7 7	7 7 = 7	0		
REQ STOP: 0	<u>17</u> <u>17</u> <u>1</u>	17 17 17	0		
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT:	NOV: DEC:	•
ON:				\boxtimes	:
CONTROLS					
TYPE OF COM	TROLS: ELECTRIC	THERM	IOSTAT TYPE:	SINGLE SETPOINT	
PRESENT TEMP WIN	TR OCC:	O:	DECK DEG F:	0	<u> </u>
PRESENT TEMP WINTR		COLD	DECK DEG F: ED AIR DEG F:	0	=
PRESENT TEMP SU	IM OCC:	0 OTHER SETPO			: :
PRESENT TEMP SUM	<u></u>		POINT DEG F:	C	<u> </u>
MIN OA DMPR CONTRO	DL: N MIXED AIR	DMPR CONTROL: N	IMPLEMENT (DEMAND LIMIT CNT	RLS? N
MAX OA DMPR CONTRO	DL: N ECONOMIZ	ZER DB CONTROL: N		TIME CL	OCK: N
RET AIR DMPR CONTRO	DL: N ECONOMIZ	ER WB CONTROL: N	TIME	CLOCK OPERATIO	NAL? N
EXH AIR DMPR CONTRO	OL: N				
OTHER CONTROLS					
CONTROLS COM	INICH I 5:				1

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/18/94
PREPARED BY: JM

BUILDING NUMBER	R: 0723		
AHU NUMBER	R: UH-4	AHU LOCATION: BAY	
REFRIG SYS # SRVNG AI	HU: NONE	SERVES AREA: BAY	
	% O	F BLDG AREA HEATED:	8
AHU UNIT TYPE UNIT I	HEATER	NUMBER	OF ZONES IF MZ UNIT: 0
CFM-HTG:	740	CFM-CLG:	0
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:	DUNHAM-BUSH	UNIT MODE	EL: VHU-10
SUPPLY FAN HP:	0.25	RET/EXH FAN H	IP : 0
SUPPLY FAN MTR MFG:	DAYTON	RET/EXH FAN MTR ME	· G:
SUPPLY FAN MTR MODEL:	5K907B	RET/EXH FAN MTR MODE	EL:
COMMENTS:			:
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL:			
HUMIDIFIER:		H	
COOLING COIL:	NONE	<u> </u>	
SCHEDULE			
DAY SCHEDULE NO:	2	MONT	TH SCHEDULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED	: THUR: FRI: SAT:	
PRES START: 0	0 0	0 0 0 0	
PRES STOP: 24	24 24 2	4 24 24 24	
REQ START: 0		7 7 0	
REQ STOP: 0	17 17 1	7 17 17 0	
	MAR: APR: MAY:	JUN: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT	TYPE: SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC:	HOT DECK I	
PRESENT TEMP WINTR U	NOCC:	COLD DECK I	
PRESENT TEMP SUM	M OCC:	0 OTHER SETPOINT DES	
PRESENT TEMP SUM U	NOCC:	0 OTHER SETPOINT D	
MIN OA DMPR CONTROL	.: N MIXED AIR	DMPR CONTROL: N IMPLE	MENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL	=	ER DB CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL		ER WB CONTROL: N	TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL	.: N		
071177 0017701 0 7			
OTHER CONTROLS D	ESCR:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: JM

BUILDING NUMBER: 0723	BOILER RM LOCATION:	MER
BOILER UNIT		
BLR/C	ONVERTER SERVES AREA OR SERVICE: ALL	
— SOURCE OF BLDG HEAT —		
● ⊠ BOILER	CONVERTER	
BOILER TAG: BLR-1	CONVERTER TAG:	
BOILER TYPE: MED PRESS STEAM	(15# TO 125#) CONVERTER TYPE: CONV HT SOURCE:	
FUEL TYPE: NAT. GAS	CONV HI SOURCE:	
CENTRAL PLANT DIRECT		
NAMEPLATE	% AREA HEATED BY BB RADIATION	: 90
BOILER MFG: BURNHAM	BLR CAP OUTPUT (BTUH):	2,603,000
UNIT MODEL: 4FL-311-40-LB	BLR CAP INPUT (BTUH):	3,254,000
COMMENTS:		
		,
SCHEDULE		
DAYS SCHEDULE NO: 2	MONTH SECHE	DULE NO: 1
SCHEDULE COMMENTS:		
SUN: MON: TU	E: WED: THUR: FRI: SAT:	
PRES START: 0 0	0 0 0 0	
	$\frac{24}{7} = \frac{24}{7} = \frac{24}{7} = \frac{24}{7} = \frac{24}{0}$:
REQ START: 0 7 REQ STOP: 0 17	$\frac{7}{17}$ $\frac{7}{17}$ $\frac{7}{17}$ $\frac{7}{17}$ $\frac{0}{0}$	
REGION. 0 17		<u> </u>
MONTHS JAN: FEB: MAR: APR:	MAY: JUN: JUL: AUG: SEP: OCT:	NOV: DEC:
ON: 🛛 🖂 🖂 🖂		\boxtimes
CONTROLS		
TYPE OF BLR CONTROLS: ELEC	CTRIC RESET CONT	ROLS: Y
OPERATING SETPOINT:	10 DEG F or PSIG	
TYPE OF BURNER CONTROLS:		
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/18/94

PREPARED BY: JM

BUILDING NUMBER: 0723	BOILER RM LOCATION: MER
BOILER UNIT	
SOURCE OF BLDG HEAT	BLR/CONVERTER SERVES AREA OR SERVICE: BAY FLOOR
BOILER	<u>CONVERTER</u>
BOILER TAG:	CONVERTER TAG: CV-1
BOILER TYPE:	CONVERTER TYPE: STM TO HW
FUEL TYPE:	CONV HT SOURCE: BLR-1
CENTRAL PLANT DIRECT.	
IAMEPLATE	% AREA HEATED BY BB RADIATION:
BOILER MFG:	BLR CAP OUTPUT (BTUH): 832,960
UNIT MODEL:	BLR CAP INPUT (BTUH):
COMMENTS:	
CHEDULE	
DAYS SCHEDULE NO: 2	MONTH SECHDULE NO: 1
CHEDULE COMMENTS:	Name of the Control o
SUN: MON	: TUE: WED: THUR: FRI: SAT:
	0 0 0 0
PRES STOP: 24 2	
	$\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{0}{2}$
REQ STOP: 0 1	7 17 17 17 0
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🛣 🛣	
ONTROLS	
TYPE OF BLR CONTROLS OPERATING SETPOINT TYPE OF BURNER CONTROLS	DEG F or PSIG
CONTROLS COMMENTS	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: JM

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUMBER:	0723			BLDG	NAME:	MNT HAI	NGAR C	OMB			
PER RAD (SYSTEI	M TAG) NO	: RAD	-1		RAD S	YS LOCA	TION:	BAY FLO	OR		
SOURCE OF	HEATING	: CV-1		:	S	ERVES A	AREA:	BAY FLO	OR		
RADIATION	UNIT TYPE	: HW				% AREA	HTG:		32	2	
RADIATION	PUM	>									
PUMP TAG: 1			PUMP H	P:	0.5	PUMP	MFG:	BELL & G	OSSETT		
						PUMP M	ODEL:	M80037			
RADIATION	PUM	>									
PUMP TAG: 2			PUMP H	P:	0.5	PUMP	MFG:	BELL & C	OSSETT		
					I	PUMP M	ODEL:	M80037			
SCHEDULE											
DAYS SCH	EDULE NO):	2	MC	NTHS SC	HEDULE	NO:		1		
SCHEDULE C	OMMENTS	s:									_
	SUN:	MON:			HUR:	FRI:	SAT:				
PRES START:	0	0			0	0	0				
PRES STOP:	24	24	24	24	24	24	24				
REQ START: REQ STOP:	0	<u>7</u>	17	$\frac{7}{17} =$		<u>7</u>	0				
REQ STOP:			<u> </u>		17						
MONTHS JAN:	FEB:	MAR:	APR: MA	Y: JUN	JUL:	AUG:	SEP	OCT:	NOV:	DEC:	;
ON:	\boxtimes	\boxtimes						\boxtimes	X		
CONTROLS											
TYPE OF F	RAD. CONT	ROLS:	ELECTRIC								
RADIA	TION CON	ITROL:	2-WAY VAL	VE, MANU	JAL O						
oc	C HT SPA	CE SP:	0								
UNOC	C HT SPA	CE SP:	0			R	ESET C	ONTROL:	N		
CONTR	ROL COMM	ENTS:	!								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LEY, KS

PREPARED BY: JM

EMC NO: 1406-001

DATE: 10/18/94

LOCATION: FT. RILEY, KS

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	0723				BLDG I	NAME:	MNT HAI	NGAR C	ОМВ			
PER RAD (SYSTEM TAG) NO: RAD			A Management of the control of the c					1ST & 2N	D FLR. C	OFFICES	mar-100 mole		
SOURCE OF HEATING: BLR		-1	1 SER			SERVES	ERVES AREA: 15		1ST & 2ND FLR. OFFICES				
RAD	DIATION	UNIT TYP	E: STE	AM				% AREA	HTG:		2	5	
SCHEE	ULE												
DA	YS SCH	EDULE N	0:		2	МО	NTHS S	CHEDULE	NO:		1		
SCH	EDULE C	OMMENT	s:										
		SUN:	MON:	TUE	: WE	D: T	IUR:	FRI:	SAT:	 			
PRES S	START:	0	0	(0	0	0	0	0				
PRES	STOP:	24	24	24	4	24	24	24	24				
REQ	START:	0	7		7	7	7	7	0				
REQ	STOP:	0	17	1	7	17	17	17	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	IN A SERVICE P
ON:	\boxtimes	\boxtimes								\boxtimes			
CONT	ROLS												
TY	PE OF F	RAD. CON	TROLS:	ELECT	TRIC								
	RADIA	TION CO	NTROL:										
	00	C HT SP	ACE SP:	I No. 10 mark at 120	0								
	UNOC	C HT SP	ACE SP:	-	0			F	RESET C	ONTROL:	N		
	CONTR	ROL COM	MENTS:										

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

723

FILE:

723.XLS

AIF	HAND	LING UI	VIT - HV	AC UPO	BRADE	OBSER\	/ATION	S	
AHU NO.:	AHU-1	LOCATIO	N (Rm)	BAY					
AHU TYPE:	SZ	MFG.:	DUNHAM			MODEL:			
SZ - Single Zone	H&V - He	ating & Vn	tltng.	FC - Fan C	oil (Indicat	e 2P for 2	Pipe or 4P	for 4 Pipe	•
MZ - Mulitzone	:VAV - Va	riable Air V	/ol.	RHT - Reh	eat Systen	1			
DD - Dual Duct	UH - Unit	Heater		IND - Indu	ction Syste	em			
O.A. DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT		RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT		RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	PERIMETOR	RADIATION	IN OFFICE A	REAS WITH M	IANUAL CON	TROL VALVE	S.	DPR-ACT = Dam	per Actuator
								RP-ACT = Repla	ce Actuator
FILTER SECTION	N/A:	Ток:	REPLACE	*	SIZE:	-i			
		TER, COIL			0122.				
COMMENTS:	- NO FIL	IER, COIL	EXPOSED						
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEAF	RINGS:	COMMEN	TS:	GE MODL	E: 5KH33G	G111E
SUPPLY FAN MOTOR	OK: X	REPLACE	:		COMMEN	TS:	1/6 HP		
INLET VANES	N/A: X	OK:	COMMEN	TS:					
RETURN AIR FAN	ок:	REPLACE	FAN BEAF	RINGS:	COMMEN	TS:	N/A		
RETURN FAN MOTOR	ОК:	REPLACE	:		COMMEN	TS:			
COMMENTS:	CONDEN	SATE PMP	S CONTIN	EOUSLY RI	JNNING A	ΓEACH HE	ATING FA	N COIL IN	THE BAY
AT 1/3 HP.									
	.4-10								
COOLING COIL	N/A: X	ок:	REPLACE		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	ок: х	REPLACE	•	SIZE:	CNTLVLV	MANUAL	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	ок:	REPLACE	:	SIZE:	CNTLVLV	OK:	RP- ACT:	
REHEAT COIL	N/A: X	OK:	REPLACE	:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	TYPICAL	OF (4) UN	ITS IN BAY	' AREA				RP-ACT = Repla	ce Actuator
								RP-BD = Replac	e Body
AHU PUMP MOTOR	N/A:	OK:	REPLACE		SIZE:				
AHU PUMP SEALS	N/A:	ок:	REPLACE	:	SIZE:				
COMMENTS:									
PIPE INSULATION	N/A:	ок:	MISSING	· X	ESTIMAT	ED QUANT	TTY:	20' @ 3"	
DUCT INSULATION	N/A: X	OK:	MISSING			ED QUANT			
	J14/A. A	JOK.	LIVIIOOIING	·	LO HIVIATI	LD GOAIN			
COMMENTS:									· · · · · · · · · · · · · · · · · · ·

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 10 Nov-94

HECKED DV.

CWW AJN

CHECKED BY:

BLDG: **723** FILE: 723.XLS

BOI	LER &	CONVE	RTER - HVAC (JPGRAI	DE OBSE	RVATI	ONS	
BOILER/CONVERTER I	٧٥.	BLR-1	LOCATION (RM)	MER				
BOILER TYPE:	STM		MFG.: BURNHA	М	MODEL:	4FL-311	-40-LB	
ONVERTER TYPE:	STM/HW		MFG.:		MODEL:			
STM - Steam	STM/HW	- Steam to	Hot Water Conv.	HTHW/S	TM - High T	emp HW	to Steam Co	onvertor
W - Hot Water	HTHW/H	W - High T	emp. HW to HW Cv.	DHW - D	omestic Ho	t Water (Convertor	
BOILER BURNER	ATMOSP	HERIC:	POWER: X	ок:	Χ	REPLAC	E:	
COMMENTS:								
BLR PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	·····			
BLR PUMP SEALS	N/A:	ОК:	REPLACE:	SIZE:				
COMMENTS:								
						3		
				, and the state of				**
BLR INSULATION	N/A:	ок: х	MISSING:	ESTIMA	TED QUANT	ITY:	· · · · · · · · · · · · · · · · · · ·	
PIPE INSULATION	N/A:	ОК:	MISSING: X	ESTIMA"	TED QUANT	TTY:	3' @ 6" &	15' @ 4
COMMENTS:								
		···						
HW PUMP MOTO	N/A:	OK: X	REPLACE:	SIZE:	1/2 HP			
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		······································		
HW PUMP MOTO	N/A:	OK: X	REPLACE:	SIZE:	1/2 HP	West of the control o		
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:				
HW PUMP MOTO	N/A:	OK:	REPLACE:	SIZE:				
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		***************************************		
HW PUMP MOTO	N/A:	OK:	REPLACE:	SIZE:				
HW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:				
COMMENTS:	<u> </u>				***************************************			·
T. T. (1) (1)								
CV PUMP MOTOR	N/A:	ок: х	REPLACE:	SIZE:				
CV PUMP SEALS	N/A:	ок: х	REPLACE:	SIZE:				
COMMENTS:		······································		<u></u>				
CV INSULATION	N/A:	OK: X	MISSING:	ESTIMA	TED QUANT	ITY:		
	N/A:	ок:	IX		TED QUANT		30' @ 1-1	/2"
COMMENTS:		1	1	1-2				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94 PREPARED BY: JM/AJN/AMS

LOCATION: FT. RILEY, KS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NAME: MNT HANGAR COMB BLDG NUMBER: 0727

ELECTRIC METER: N GAS METER: N

SUSPECT ACM: N

CONDITIONED SQFT: 36,152

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

SUN: MON: TUE: WED: THUR: FRI: PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 7 REQ START: 0 7 7 7 7 0 REQ STOP: 0 16 16 16 0

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

DUIL DING NUMBER		
BUILDING NUMBER		
AHU NUMBER	R: AHU-1	AHU LOCATION: MER
REFRIG SYS # SRVNG AI		SERVES AREA: MAINT. SHOPS/TOOL ROOM OF BLDG AREA HEATED: 12
		TE TE TE TE TE TE TE TE TE TE TE TE TE T
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	5,160	CFM-CLG: 5,160
MIN %OA:	10	MAX %OA: 100
NAMEPLATE		
UNIT MFG:	TRANE	UNIT MODEL: CCDV03APBB
SUPPLY FAN HP:	5	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	and the second s	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	200V	RET/EXH FAN MTR MODEL:
COMMENTS:		
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL:	NONE	
HEATING COIL:		
REHEAT COIL:	NONE	
HUMIDIFIER:	NONE	
COOLING COIL:	DX	
SCHEDULE		
DAY SCHEDULE NO:	11	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN:	MON: TUE: WI	/ED: THUR: FRI: SAT:
PRES START: 0	0 0	0 0 0
DDEC CTOD: 24		
PRES STOP: 24	24 24	24 24 24 24
REQ START: 0	7 7	7 0
REQ START: 0 REQ STOP: 0	7 7	7 7 0 16 16 0
REQ START: 0 REQ STOP: 0	7 7 7 16 16	7 7 0 16 16 0
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	7 7 16 16 MAR: APR: MAY:	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC:
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	7 7 16 16 MAR: APR: MAY: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC: \[\times \tim
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT	TROLS: PNEUMATIC	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	TROLS: PNEUMATIC	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC: □ □ □ □ □ □ □ □ □ □ □ □ □ □ THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE U	TROLS: PNEUMATIC NOCC:	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	TROLS: PNEUMATIC NOCC:	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC: □ □ □ □ □ □ THERMOSTAT TYPE: HOT DECK DEG F: □ □ □ 0 COLD DECK DEG F: □ □ 0 □ □
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM U	TROLS: PNEUMATIC ROCC: NOCC: NOCC:	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC: □ □ □ □ □ □ □ THERMOSTAT TYPE: SINGLE SETPOINT □ HOT DECK DEG F: □ □ □ 0 COLD DECK DEG F: □ □ 0 MIXED AIR DEG F: □ □ 0 OTHER SETPOINT DESCRIP: □ □ 0 OTHER SETPOINT DEG F: □ □
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	TROLS: PNEUMATIC ROCC: NOCC:	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	TROLS: PNEUMATIC ROCC: NOCC: N	7
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	TROLS: PNEUMATIC ROCC: NOCC: N	7 7 7 0 16 16 16 0 : JUN: JUL: AUG: SEP: OCT: NOV: DEC: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	TROLS: PNEUMATIC ROCC: NOCC: N	7

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/18/94

ENT CONTRACT NO: DACA 01-94-D-003 LOCATION: FT. RILEY, KS PREPARED BY: JM/AJN/AMS

A11 \ 11.	ANDLING UNIT	SURVET OBSERVATIONS	,
BUILDING NUMBER		AHU LOCATION: MER	
AHU NUMBEI		AND LOCATION: MER	
REFRIG SYS # SRVNG A		SERVES AREA: SHOPS AND BREAKE	ROOM 5
	/0 O1 B1	EDO ANLA HEATED.	
AHU UNIT TYPE MAKE	-UP AIR UNIT	NUMBER OF ZONES IF I	NZ UNIT: 4
CFM-HTG:	1,175	CFM-CLG: 1,175	
MIN %OA:	10	MAX %OA: 100	
NAMEPLATE			
UNIT MFG:	TRANE	UNIT MODEL: CCB12BB	RBO
SUPPLY FAN HP:	1	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	DOERR	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:			
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	DX		
SCHEDULE			
DAY SCHEDULE NO:	11:	MONTH SCHEDULE	NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	•
REQ START: 0	$\frac{7}{46} = \frac{7}{46} = \frac{7}{46}$	7 7 0	•
REQ STOP: 0	16 16 16	16 16 0	·
***************************************	MAR: APR: MAY: JU	IN: JUL: AUG: SEP: OCT: NOV	: DEC:
ON: ☑ ☑			\boxtimes
CONTROLS			
TYPE OF CON	TROLS: ELECTRIC		E SETPOINT
PRESENT TEMP WINT	R OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR L	JNOCC: 0		0
PRESENT TEMP SU PRESENT TEMP SUM L			0
MIN OA DMPR CONTRO	L: N MIXED AIR DM	IPR CONTROL: N IMPLEMENT DEMAN	ID LIMIT CNTRLS? N
MAX OA DMPR CONTRO		DB CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTRO			K OPERATIONAL? N
EXH AIR DMPR CONTRO	 		
OTHER CONTROLS			
CONTROLS COM	MENIS'		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/18/94 PREPARED BY: JM/AJN/AMS

_					
	BUILDING NUMBER AHU NUMBER	AMERICA 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- AHILLOCATION	I: PAINT BOOTH	
	AND NOMBER	(. <u>ITV-1</u>	_ AND ECCATION	. PAINT BOOTH	-
	REFRIG SYS # SRVNG A		SERVES AREA: BLDG AREA HEATED:	PAINT BOOTH	8
	AHU UNIT TYPE HEATI	ING AND VENTILATING	NL	JMBER OF ZONES IF	MZ UNIT: 0
	CFM-HTG:	2,000	CFM-CLG:)
	MIN %OA:	100	MAX %OA:	10	
Ν	IAMEPLATE				
	UNIT MFG:		UN	IT MODEL:	
	SUPPLY FAN HP:	0.5	RET/EX	H FAN HP:	0
	SUPPLY FAN MTR MFG:		RET/EXH FAN	MTR MFG:	
	SUPPLY FAN MTR MODEL:	programme a supplication of the supplication o	RET/EXH FAN MT	R MODEL:	
	COMMENTS:				
_	Coil	Coil Type	Modulating	Valve?	
		The state of the s			
	PREHEAT COIL: HEATING COIL:		H		
	REHEAT COIL:				
	HUMIDIFIER:		H		
	COOLING COIL:				
S	CHEDULE				
_	DAY SCHEDULE NO:	11		MONTH SCHEDUL	E NO: 1
	SCHEDULE COMMENTS:				:
	SUN:	MON: TUE: WED		SAT:	:
	PRES START: 0	0 0 0		0	
	PRES STOP: 24	24 24 24			
	REQ START: 0	$\frac{7}{10}$ $\frac{7}{10}$ $\frac{7}{10}$			
	REQ STOP: 0	16 16 16	5 16 16	0	·
N	MONTHS JAN: FEB: ON:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT: NO	OV: DEC:
	ON. ⊠ ⊠				
3	ONTROLS				
	TYPE OF CONT	FROLS: ELECTRIC			GLE SETPOINT
	PRESENT TEMP WINTE	<u> </u>	0	DECK DEG F:	0
	PRESENT TEMP WINTR U	NOCC:	0	ED AIR DEG F:	0
	PRESENT TEMP SUM PRESENT TEMP SUM U		0 OTHER SETPO 0 OTHER SETI	POINT DESCRIP:	0
	MIN OA DMPR CONTROL	L: N MIXED AIR I	DMPR CONTROL: N	IMPLEMENT DEM	AND LIMIT CNTRLS?
	MAX OA DMPR CONTROL		ER DB CONTROL: N	IIII CEINEITI DEIII	TIME CLOCK:
	RET AIR DMPR CONTROL		R WB CONTROL: N	TIME CLO	CK OPERATIONAL?
	EXH AIR DMPR CONTROL			inic 320	en enamonati

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/18/94 PREPARED BY: JM/AJN/AMS

			
BUILDING NUMBEI		AHU LOCATION: MAINT. BAY	1
REFRIG SYS # SRVNG A		SERVES AREA: MAINT. BAY GAREA HEATED:	7.5
AHU UNIT TYPE UNIT	HEATER	NUMBER OF ZONES IF M	Z UNIT: 0
CFM-HTG:	2,800	CFM-CLG: 0	
MIN %OA:		MAX %OA: 0	
NAMEPLATE			
UNIT MFG:	AIRTHERM	UNIT MODEL: 29SD2	
SUPPLY FAN HP:		RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:		TELLET AT MICHAEL	
COILS	<u>(</u>		Address V
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:		: Ц	
HEATING COIL:			
REHEAT COIL:			
HUMIDIFIER: COOLING COIL:			
COOLING COIL.	NOINE	•	
SCHEDULE			
DAY SCHEDULE NO:	11	MONTH SCHEDULE	NO:1
SCHEDULE COMMENTS:			:
SUN:	MON: TUE: WED: TH	IUR: FRI: SAT:	,
PRES START: 0	0 0 0	0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	7 7 7	7 7 0	
REQ STOP: 0	16 16 16	16 16 0	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV	: DEC:
ON:		<u> </u>	
CONTROLS			
TYPE OF CON	TROLS: ELECTRIC	THERMOSTAT TYPE: OTHE	
PRESENT TEMP WINT	R OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR I	UNOCC: 0	COLD DECK DEG F:	0
DDECENT TEMP OF	M OCC:	MIXED AIR DEG F: OTHER SETPOINT DESCRIP:	<u>0</u>
PRESENT TEMP SU PRESENT TEMP SUM (OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTRO	L: N MIXED AIR DMPR	CONTROL: N IMPLEMENT DEMAN	D LIMIT CHTRLS? N
MAX OA DMPR CONTRO			TIME CLOCK: N
RET AIR DMPR CONTRO			K OPERATIONAL?
EXH AIR DMPR CONTRO		, co.tition. [1]	. S. Elettional: In
OTHER CONTROLS			
CONTROLS COM	MENTS		i

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94 PREPARED BY: JM/AJN/AMS

			,
BUILDING NUMBER AHU NUMBER	Control of the Contro	AHU LOCATION: MAINT. BAY	
REFRIG SYS # SRVNG AH	U: NONE	SERVES AREA: MAINT, BAY	
KEI KIG 313 # SKVNG AII	*****	G AREA HEATED:	7.5
AHU UNIT TYPE UNIT H	EATER	NUMBER OF ZONI	ES IF MZ UNIT: 0
CFM-HTG:	2,800	CFM-CLG:	2,800
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:	AIRTHERM	UNIT MODEL: 298	SD2
SUPPLY FAN HP:	0.33	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	DAYTON	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	THE PARTY NAMED AND PARTY NAME
COMMENTS:	The state of the s		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
	STEAM		
	NONE	<u> </u>	
	NONE	: <u> </u>	
COOLING COIL:	NONE	Ы	
SCHEDULE			
DAY SCHEDULE NO:	11	MONTH SCH	DULE NO: 1
SCHEDULE COMMENTS:			
SUN:		IUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	*
REQ START: 0 REQ STOP: 0	$\frac{7}{16} = \frac{7}{16} = \frac{7}{16} = \frac{7}{16}$	$\frac{7}{16} = \frac{7}{16} = \frac{0}{0}$	
REQUIOF. U	<u> 16 16 16 ; </u>	16 16 0	
	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTR	ROLS: ELECTRIC	THERMOSTAT TYPE:	OTHER
PRESENT TEMP WINTR	OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR UN	IOCC: 0	COLD DECK DEG F: Mixed air deg f:	0
PRESENT TEMP SUM	OCC: 0	OTHER SETPOINT DESCRIP:	<u>0</u> .
PRESENT TEMP SUM UN	·	OTHER SETPOINT DESCRIP:	0
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: N IMPLEMENT D	EMAND LIMIT CHTRLS?
MAX OA DMPR CONTROL:		—	TIME CLOCK:
RET AIR DMPR CONTROL:			CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL:		Time	
OTHER CONTROLS DE			
OTHER CONTROLS DE	ENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94 PREPARED BY: JM/AJN/AMS

LOCATION: FT. RILEY, KS AIR HANDLING UNIT SURVEY OBSERVATIONS

7(11(11)			
BUILDING NUMBER	R: 0727		
AHU NUMBER	R: UH-3	AHU LOCATION: MAINT. E	BAY
REFRIG SYS # SRVNG AF	HU: NONE	SERVES AREA: MAINT. BA	Y
REPROPERTY.		DG AREA HEATED:	7.5
AHU UNIT TYPE UNIT I	HEATER	NUMBER OF 2	ONES IF MZ UNIT: 0
CEN UTC.	2.800	CFM-CLG:	0
CFM-HTG: MIN %OA:	2,800	MAX %OA:	0
NAMEPLATE	<u> </u>		
UNIT MFG:	AIRTHERM	UNIT MODEL:	29SD2
SUPPLY FAN HP:	0.33	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	DAYTON	RET/EXH FAN MTR MFG:	A SECTION OF THE PROPERTY OF T
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	Control of the Contro
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:			
REHEAT COIL:	NONE		
HUMIDIFIER:			
COOLING COIL:			
COUEDULE			
SCHEDULE			
DAY SCHEDULE NO:	11	MONTH S	SCHEDULE NO: 1
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	7 7 7	7 7 0	
REQ STOP: 0	16 16 16	16 16 0	
			OT: NOV. DEC.
MONTHS JAN: FEB: ON:	MAR: APR: MAY: JUN		CT: NOV: DEC:
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT TYPE	
PRESENT TEMP WINTI	R OCC: 0	HOT DECK DEG	
PRESENT TEMP WINTR U		COLD DECK DEG	
		MIXED AIR DEG	
PRESENT TEMP SUI PRESENT TEMP SUM U		OTHER SETPOINT DESCR OTHER SETPOINT DEG	
MIN OA DMPR CONTROL	L: N MIXED AIR DMF	PR CONTROL: N IMPLEME	NT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL			TIME CLOCK:
			IME CLOCK OPERATIONAL?
RET AIR DMPR CONTROI EXH AIR DMPR CONTROI		NA CONTROL: [N]	INIL CLOCK OPERATIONAL!
OTHER CONTROLS	DESCR:		
CONTROLS COMM	MENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

AIN HANDLING UNIT 3	OKVET OBSEKVATIONS
BUILDING NUMBER: 0727 AHU NUMBER: UH-4	AHU LOCATION: MAINT. BAY
REFRIG SYS # SRVNG AHU: NONE % OF BLE	SERVES AREA: MAINT. BAY DG AREA HEATED: 7.5
AHU UNIT TYPE UNIT HEATER	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: 2,800	CFM-CLG: 0
MIN %OA: 0	MAX %OA: 0
NAMEPLATE	
UNIT MFG: AIRHERM	UNIT MODEL: 29SD2
SUPPLY FAN HP: 0.33	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: COMMENTS:	RET/EXH FAN MTR MODEL:
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	
SCHEDULE	
DAY SCHEDULE NO: 11	MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: T	THUR: FRI: SAT:
PRES START: 0 0 0 0	0 0 0
PRES STOP: 24 24 24 24	24 24 24
REQ START: 0 7 7 7	7 0
REQ STOP: 0 16 16 16	16 16 0
MONTHS JAN: FEB: MAR: APR: MAY: JUN	: JUL: AUG: SEP: OCT: NOV: DEC:
ON: □ □ □ □	
CONTROLS	·
TYPE OF CONTROLS: ELECTRIC	THERMOSTAT TYPE: OTHER
PRESENT TEMP WINTR OCC: 0	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC: 0	COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC: 0 PRESENT TEMP SUM UNOCC: 0	OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXED AIR DMPI	
MAX OA DMPR CONTROL: N ECONOMIZER DI	
RET AIR DMPR CONTROL: N ECONOMIZER WI	
EXH AIR DMPR CONTROL: N	- Time second of Electronace
OTHER CONTROLS DESCR:	
GITTEL GOTTINGED DEGUE	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94
PREPARED BY: JM/AJN/AMS

BUILDING NUMBER: 0727	BOILER RM LOCATION: MER								
BOILER UNIT									
	RTER SERVES AREA OR SERVICE: ALL								
SOURCE OF BLDG HEAT									
● ⊠ BOILER	CONVERTER								
BOILER TAG: BLR-1	CONVERTER TAG:								
BOILER TYPE: MED PRESS STEAM (15# TO									
FUEL TYPE: NAT. GAS	CONV HT SOURCE:								
CENTRAL PLANT DIRECT	:								
NAMEPLATE	% AREA HEATED BY BB RADIATION: 33								
BOILER MFG: KEWANEE	BLR CAP OUTPUT (BTUH): 3,350,000								
UNIT MODEL: M-335-KGO	BLR CAP INPUT (BTUH): 4,181,000								
COMMENTS:									
SCHEDULE									
DAYS SCHEDULE NO: 11	MONTH SECHDULE NO: 1								
SCHEDULE COMMENTS:									
SUN: MON: TUE: V	WED: THUR: FRI: SAT:								
PRES START: 0 0 0	0 0 0								
PRES STOP: 24 24 24	$\frac{24}{7}$ $\frac{24}{7}$ $\frac{24}{7}$ $\frac{24}{0}$								
REQ START: 0 7 7 7 16 16 16	$\frac{7}{16}$ $\frac{7}{16}$ $\frac{7}{16}$ $\frac{0}{0}$								
REQ STOP: 0 16 16									
MONTHS JAN: FEB: MAR: APR: MAY	Y: JUN: JUL: AUG: SEP: OCT: NOV: DEC:								
on: ⊠ ⊠ ⊠ □									
CONTROLS									
TYPE OF BLR CONTROLS: ELECTRIC	RESET CONTROLS: Y								
OPERATING SETPOINT:	10 DEG F or PSIG								
TYPE OF BURNER CONTROLS:									
CONTROLS COMMENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: JM/AJN/AMS

BOILER RM LOCATION: MER	
BLR/CONVERTER SERVES AREA OR SERVICE: ADDITION	
Table 1	
CONVERTER	-
CONVERTER TAG:	-
TO 250 DEG) CONVERTER TYPE:	
CONV HT SOURCE:	-
% AREA HEATED BY BB RADIATION:	0
BLR CAP OUTPUT (BTUH): 360,000	
BLR CAP INPUT (BTUH): 450,000	
MONTH SECHDULE NO: 3	- - -
	-
N: TUE: WED: THUR: FRI: SAT:	
AND THE PROPERTY OF THE PROPER	
0 16 16 16 0	
APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
S: ELECTRIC RESET CONTROLS: Y	
T: 150 DEG F or PSIG	
3:	
S:	
PUMP HP: 3 PUMP MFG:	_
PUMP MODEL:	_
PUMP HP: 1 PIIMP MEG-	
PUMP MODEL:	=
	BLR/CONVERTER SERVES AREA OR SERVICE: ADDITION CONVERTER TAG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94
PREPARED BY: JM/AJN/AMS

BUIL	DING NU	VIBER: ()727				I	BOILER	RM LOC	ATION:	MER		
BOILE	R UN	IT											
SOU	RCE OF E	LDG HEA	ΛT	BLR/CO	NVERT	ER SER	VES ARE	A OR SE	RVICE:	BAY FL	OOR RA	DIATION	
<u> </u>							F	NIVEDT				<u> </u>	· ·
e L	BOILE BOILER						_	ONVERTI VERTER	F	CV-1			
•	BOILER							ERTER	<u>'</u>	STM TO HV	V		
	FUEL	-				j	i	HT SOL	1	BLR-1			
	CENTRAL	PLANT D	IRECT										
1AME	PLAT	Έ				% A	AREA HE	ATED BY	BB RAI	DIATION:			33
BOILER	MFG:						BLR CA	AP OUTP	UT (BTU	H):			
UNIT M	ODEL:						BLR	CAP INP	UT (BTU	H):			
COMM	ENTS:		***************************************			·							-
CHE	اللا ق					· · · · · · · · · · · · · · · · · · ·							
SCHE	DULE												
	SCHEDUL LE COMM	=	11						MONTI	H SECHD	ULE NO:		
		SUN:	MON:	TUE	: WE	D: TH	IUR:	FRI:	SAT:				
	START:	0	0		<u> </u>		0		0				
	S STOP:	24	24	====24		24	24	24	24				
	START: Q STOP:	0	16	16		7 16	7 16	7 16	0				
											<u>.</u>		
MONTHS		FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON	: 🗵	\boxtimes		\boxtimes						\square			
CONT	ROLS	3											
	TYPE OF	BLR CON	ITROLS:	ELECT	RIC				RESE	T CONTR	ROLS:	N	
	OPER/	TING SE	TPOINT:			DEG F	or PSIG						
TYPI	E OF BUR	NER CON	ITROLS:				!						
	CONTR	OLS COM	IMENTS:	[,		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE**: 10/18/94

PREPARED BY: JM/AJN/AMS

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	0727				BLDG N	IAME: I	MNT HAN	IGAR C	ОМВ			
PER RAD	(SYSTE	/ TAG) NO	: RAD	-1	w		RAD SY	S LOCA	TION:	BAY FLO	OR		
so	URCE OF	HEATING	: BLR-	.1			s	ERVES A	REA:	BAY FLO	OR		
RAD	I NOITAI	JNIT TYPE	: HW					% AREA	HTG:		33	3	
RADIA	TION	PUMF) 										
PUMP '	TAG: 1			PUM	IP HP:	1	1.5	PUMP		CENTUR		and the state of t	
RADIA	TION	PUMF					· · · · · · · · · · · · · · · · · · ·	PUMP MO	DDEL:	SC-1845-	FC4-7		
PUMP :	TAG: 2			PUM	IP HP:	1	1.5	PUMP	MFG:	CENTUR	Y		
							F	PUMP MO	DEL:	SC-1845-	FC4-7		
SCHEE	ULE												
DA	YS SCH	EDULE NO	:	11	-	MOI	NTHS SC	HEDULE	NO:		1		
SCHE	DULE C	OMMENTS	:										
		SUN:	MON:	TUE:			IUR:	FRI:	SAT:				
PRES S		0	0	0		_0 _			0				
	STOP: START:	24	24	24	===	24 ===		24	24				
	STOP:	0	7 16	16		<u></u>	 	<u>7</u> 16	0				
MONTHS	JAN:	FEB: N	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	· i
ON:		×	\boxtimes	\boxtimes						\boxtimes		\boxtimes	
CONT	ROLS												
TY	PE OF R	AD. CONT	ROLS:	ELECT	RIC								
	RADIA	TION CON	TROL:										
	ОС	C HT SPAC	CE SP:		0								
	UNOC	C HT SPAC	CE SP:	:	0			R	ESET C	ONTROL:	N		
	CONTR	OL COMM	ENTS:										-
													_

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/18/94

PREPARED BY: JM/AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 07	27		_	BLI	DG NAM	E: MNT	HANGA	R COMB			
REF. UNIT NUMBER/TA	AG: A	ACCU-1					LOCA	TION (ME	R#): O	UTSIDE	
	_						AH	U'S SER	VED: A	HU-2	
Ut	NIT TY	PE Al	R COOL	ED CON	IDENSIN	G UNIT, I	DX				
NAMEPLATE											
CHILLER MFG	: TR	ANE					TOWER	MFG:			
CHILLER MODEL	_: RA	UC-306	5-B			# OF T	OWER F	ANS:			1
CHILLER SERIAL NO):					Т	OWER F	AN V:			208
CHILLER V	/:			208		TOWE	R FAN A	MPS:			2.5
CHILLER AMPS	3:			13		TO	WER FA	N HP:			0.33
CHILLER PH	1:			0							
CHILLER CAP (TONS):			16							
COMMENTS	3:										
SCHEDULE											
DAYS SCHEDU SCHEDULE COMM			11					CHEDUL	E NO:	2	
	UN:	MON:	TUE			UR:	FRI:	SAT:			
								0			
PRES START:		0			0	0 =	0				
PRES STOP:	24	24	24	4	24	24	24	24			
PRES STOP: REQ START:	24 0	24 7	24	7	24 7	7	24 7	24 0			
PRES STOP:	24	24	24	7	24	24	24	24			
PRES STOP: REQ START: REQ STOP:	0 0	24 7	24	7	24 7	7	24 7	24 0	ост:	NOV:	DEC:
PRES STOP: REQ START: REQ STOP: MONTHS JAN: FE ON:	0 0	24 7 16	16	7	7 16	24 7 16	7 16	24 0 0	ост:	NOV:	DEC:
PRES STOP: REQ START: REQ STOP: MONTHS JAN: FE ON:	24 0 0	24 7 16 MAR:	16 APR:	MAY:	24 7 16 JUN:	24 7 16 JUL:	24 7 16 AUG:	24 0 0 SEP:	_	_	
PRES STOP: REQ START: REQ STOP: MONTHS JAN: FE ON: CONTROLS	24 0 0	24 7 16 MAR:	24 16 APR:	MAY:	24 7 16 JUN:	24 7 16 JUL:	24 7 16 AUG:	24 0 0 SEP:	_	_	
PRES STOP: REQ START: REQ STOP: MONTHS JAN: FE ON: CONTROLS TYPE OF CON	24 0 0	24 7 16 MAR:	16 APR:	MAY:	24 7 16 JUN:	24 7 16 JUL:	24 7 16	24 0 0 SEP:	_	_	
PRES STOP: REQ START: REQ STOP: MONTHS JAN: FE ON: CONTROLS TYPE OF CON CWS SE	24 0 0	24 7 16 MAR:	24 16 APR:	MAY:	24 7 16 JUN:	24 7 16 JUL:	24 7 16 AUG:	24 0 0 SEP:	_	_	0
PRES STOP: REQ START: REQ STOP: MONTHS JAN: FE ON: CONTROLS TYPE OF CON	24 0 0	24 7 16 MAR:	24 16 APR:	MAY:	24 7 16 JUN:	24 7 16 JUL:	24 7 16	24 0 0 SEP:	_	_	
PRES STOP: REQ START: REQ STOP: MONTHS JAN: FE ON: CONTROLS TYPE OF CON CWS SE	24 0 0 INTROL ETPOIN ETPOIN S LITE	24 7 16 MAR: S: EL NT:	APR:	MAY: TEN TEMP	24 7 16 JUN:	24 7 16 JUL:	24 7 16 AUG:	24 0 0 SEP:			0

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: JM/AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER:	0727			BL	OG NAME:	MNT	HANGA	R COMB			
REF. UNIT NUMBER	R/TAG:	ACCU-2					LOCAT	TION (ME	R#): 0	UTSIDE	
								U'S SERV	-		***************************************
	UNIT T	YPE AI	R COOLE	D CON	DENSING	UNIT,	DX				,
NAMEPLATE											
CHILLER N	/IFG: T	RANE					TOWER	MFG:			
CHILLER MOI	DEL: R	AUB-C1	3-A			# OF 1	OWER F	ANS:			1
CHILLER SERIAL	NO:					Т	OWER F	AN V:			0
CHILLE	R V:		2	30		TOWE	R FAN A	MPS:			0
CHILLER AN			71	1.4		TO	WER FA	N HP:			0.33
CHILLER	PH:			0							
CHILLER CAP (TO	NS):			15							
COMME	NTS:										
SCHEDULE											
DAYS SCHE SCHEDULE CO			11			MO	NTHS SC	CHEDULE	NO:	2	
PRES START: PRES STOP: REQ START: REQ STOP:	90 SUN: 0 24 0 0	MON: 0 24 7 16	TUE: 0 24 7 16		0 24 7	R:	FRI: 0 24 7 16	0 24 0 0			
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:					\boxtimes	\boxtimes	\boxtimes	\boxtimes			
CONTROLS											
TYPE OF C	ONTRO	LS: ĒL	ECTRIC								
CIMO	SETPO	INIT.				~		DOINT			
	SETPO	_			0		IWS SET IWR SET		-		0
		-					ANAK DE I	FUINT:	L		0
PRESS	SS LITE LITE LO S GAUG	ow: 🔼	<u> </u>	EMP L	P LITE HI: .ITE LOW: GAUGES:	N	ОТН	IER INDIC	CATIORS	S:	
CONTROL	S COM	MENTS:									

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

LOCATION: FT. RILEY, KA			BLDG:	727		FILE:	727.XLS	Au
	AIR H	ΙΔΝΟΙ ΙΝΟ	UNIT - HVAC		OBSERVA"	TIONS		······································
AHU NO.:	FC-1	LOCATION		OI OIL V	J DOLKTIN			
AHU TYPE:	FC-2P	MFG.:	AIRTHERM		MODEL:	295D2		
SZ - Single Zone		ting & Vntltng.		an Coil (Indicate)	
MZ - Mulitzone		able Air Vol.	!	Reheat System			,	
DD - Dual Duct	:UH - Unit I			nduction System				
COMP. MOTOR	N/A: X	Tok:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	·
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
CT/ACCU FAN MTR			RFLOOR HEAT WORK		D11(1(0)		DPR-ACT = Dampe	or Actuator
CT/ACCU FAN MTR	TTPICAL	OF (4) UNDER	CELOUR HEAT WORK	ino			RP-ACT = Replace	
CT/ACCU FAN MTK		***					VL-V∩ I = Vehlace	notiality
FILTER SECTION	N/A: X	OK:	IRÉPLACE:	SIZE:				
COMMENTS:	1 AV. V	1011.	I'VEL DIOL.	Toler.		·		
COMMENTS:								
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:	······································		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN		1/3 HP		
INLET VANES	N/A: X	OK:	COMMENTS:	Joonnal				
RETURN AIR FAN	OK:	I	FAN BEARINGS:	COMMEN	ITC:	N/A		
		REPLACE		COMMEN		19/75	 	
RETURN FAN MOTOR	OK:	REPLACE		COMME	VIO.			
COMMENTS:								
	100000							
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
	N/A: A	OK: X	REPLACE:	SIZE:	CNTLVLV	MANUAL	RP- ACT:	RP-BD:
HEATING COIL PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
			ON TO FLOOR. CON					
COMMENTS:			IDENSATE PUMP WIT				RP-ACT = Replace	
		CONDENSA"		II DAD BEARING	ALINTE.		RP-BD = Replace I	DOU'S
	(Z) LEAKY	CONDENSA	IE IANNO.					
AHU PUMP MOTOR	N/A:	IOK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:				
ANU PUMP SEALS	IV/A.	JON.	INEFLACE.	JOILE.		·		
COMMENTO		` `						
COMMENTS:								
COMMENTS:								
	IN/A	IOK.	IMISSING:	IESTIMAT	ED QUANTITY	,		
COMMENTS: PIPE INSULATION DUCT INSULATION	N/A:	OK:	MISSING:		ED QUANTITY			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

LOCATION. 11. NILL1, N	NOAO					CHECKEL		AJ
			BLDG:	727		FILE:	727.XLS	
	AIR H	ANDLING	3 UNIT - HVAC	UPGRADE	OBSERVA [*]	TIONS		
AHU NO.:	AHU-2	LOCATIO		VORTH				
AHU TYPE:	SZ	MFG.:	TRANE CLIMATE (CHANGER	MODEL:	CCDB03A	PBB	
SZ - Single Zone		ating & Vntltng	FC - F	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe)	
MZ - Mulitzone		iable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND -	Induction System	I			
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
CT/ACCU FAN MTR	FAIRLY N	IEW UNIT					DPR-ACT = Damp	er Actuator
CT/ACCU FAN MTR	OA AND F	RA DAMPER I	NTERLOCKED.				RP-ACT = Replace	
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	Mov. v	IDED: ACE	EAN DEAD NO.	1001111-	ITO			
	OK: X		FAN BEARINGS:	COMMEN				
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN		CENTUR	/ 1 HP	
INLET VANES	N/A: X	OK:	COMMENTS:		ON AND OFF			
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN		N/A		
RETURN FAN MOTOR	OK:	REPLACE	:	COMMEN	NTS:			
COMMENTS:								
COOLING COIL DX	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD
HEATING C STM	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD
PREHEAT COIL	N/A: X	OK: A	REPLACE:	SIZE:	CNTLVLV	OK: A	RP- ACT:	RP-BD
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
COMMENTS:	1647.7. 7	10111	pres broc.	JUIZE.	ONTEVE	JOIN.		
COMMENTO.						·	RP-ACT = Replace	
							RP-BD = Replace	D00y
		7.						
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
	N/A:	OK:	MISSING: X		ED QUANTITY:		8' @ 1"	
PIPE INSULATION	11//	0.14						
PIPE INSULATION DUCT INSULATION COMMENTS:	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

727

FILE:

727.XLS

AHU NO.:	AHU-3	LOCATIO	N (Rm) SOUTH	IMER				
AHU TYPE:	MZ-4	MFG.:	TRANE CLIMATE CH		MODEL:	CCBB12B	BKB0	
SZ - Single Zone		ating & Vntltng	. FC - Fa	n Coil (Indicate 2F	for 2 Pipe or	4P for 4 Pipe	*)	
MZ - Mulitzone		able Air Vol.	i i	Reheat System	Ť			
DD - Dual Duct	UH - Unit F	Heater	IND - Ir	duction System				
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP-ACT:	
COMP. MOTOR	N/A:	ок: х	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMP. MOTOR	N/A: X	ок:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMP. MOTOR	N/A: X	ок:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
CT/ACCU FAN MTR	SUMMER	WINTER SW	TCH, DAY/NIGHT SWIT	СН			DPR-ACT = Dampi	er Actuator
CT/ACCU FAN MTR	-						RP-ACT = Replace	Actuator
LOCKED IN THE 100% RA	POSITION							
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMENT	S:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMENT	S:	DOERR 5	HP	
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMENT	S:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMENT	S:			
COMMENTS:								***
000000000000000000000000000000000000000							****	
						7/2/4 34	IDD ACT.	RP-BD:
COOLING COIL DX	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	תר-סט.
	N/A: N/A:	OK: X	REPLACE:	SIZE: SIZE: 3/4"	CNTLVLV CNTLVLV	OK: X	RP-ACT:	RP-BD:
COOLING COIL DX HEATING COIL HW PREHEAT COIL				1	*	11	1	
HEATING COIL HW	N/A:	OK: X	REPLACE:	SIZE: 3/4"	CNTLVLV	ок: х	RP- ACT:	RP-BD:
HEATING COIL HW PREHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: 3/4" SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD: RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: 3/4" SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: 3/4" SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: 3/4" SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: 3/4" SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: 3/4* SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: 3/4" SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV ENTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: 3/4" SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV ENTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: 3/4" SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV ENTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: 3/4* SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV ENTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:
HEATING COIL HW PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: 3/4* SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV ENTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

FILE:

10 Nov-94

PREPARED BY:

727.XLS

AJN AJN

CHECKED BY:

	REFRIG	RATION I	EQUIPMENT - HV	AC UPGRADE OBSERVATIONS	
CHILLER / EQUIP. NO.		ACCU-1	LOCATION (RM)	NORTH SIDE OF BLDG.	
REFG. EQUIP. TYPE:		ACCU	MFG.: TRANE	MODEL: RAVC-306-B	
C-WCT = Centrifugal w/	Water Side (Cooling Tower	R-ACCU =	Reciprocating w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating			er ASB-WCT	= Absorption w/ Water Side Cooling Tower	
ACCU = Air Cooled Con	densing Unit		CT = Cool	ing Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:	COMP. 20)8V/13 AMPS,	OLD BUT STILL RUNS.		
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	ОК: Х	REPLACE:	SIZE:	
COMMENTS:	FAN 208V	// 2.5 AMP			
CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A:	ок: х	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:					
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	- A Magnesia
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	ОК:	REPLACE:	SIZE:	
COMMENTS:	<u></u>				
	.,,				

				ALAN	
				The state of the s	

727

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 10 Nov-94 CWW

CHECKED BY:

AJN

BLDG:

727

FILE: 727.XLS

EFG. EQUIP. TYPE: R-ACCU MFG.: TRANE MODEL: RAUB-C153-A WCT = Centrifugal w/ Water Side Cooling Tower WCT = Reciprocating w/ Water Side Cooling Tower WCT = Reciprocating w/ Water Side Cooling Tower WCT = Reciprocating w/ Water Side Cooling Tower CCU = Air Cooled Condensing Unit CT = Cooling Tower C	R-ACCU	HILLER / EQUIP. NO.		CH-2	LOCATION (RM)	OUTSIDE			
ASB-WCT = Absorption w/ Water Side Cooling Tower CCU = Air Cooled Condensing Unit CT = Cooling Tower Size = CT = Cooling Tower Size = CT = COOLING TOWER Size = CT = CT = CT = CT = CT = CT = CT = C	ASB-WCT = Absorption w/ Water Side Cooling Tower CCU = Air Cooled Condensing Unit	EFG. EQUIP. TYPE:		R-ACCU	1 ' '	NE	MODEL:	RAUB-C153-A	4
ASB-WCT = Reciprocating w/ Water Side Cooling Tower	ASB-WCT = Reciprocating w/ Water Side Cooling Tower	C-WCT = Centrifugal w/	Water Side C	Cooling Tower	R-AC	CU = Reciprocatin	g w/ Air Cooled	d Condensing U	nit
ACCU = Air Cooled Condensing Unit COMP. MOTOR N/A: OK: X REPLACE: SIZE: 230 V AND 71.4 A COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: V OK: X REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: X OK: REPLACE: SIZE: COMMENTS: CHILLER INSUL N/A: X OK: MISSING: ESTIMATED QUANTITY: CHILLER INSUL N/A: X OK: MISSING: ESTIMATED QUANTITY: CHILLER INSUL N/A: X OK: REPLACE: SIZE: CHIP PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHIP PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHIP PUMP MOTOR N/A: OK: REPLACE: SIZE: CHIP PUMP SEALS N/A: OK: REPLACE: SIZE: CHIP PUMP MOTOR N/A	ACCU = Air Cooled Condensing Unit CT = Cooling Tower COMP. MOTOR N/A: OK: X REPLACE: SIZE: 230 V AND 71.4 A COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: X OK: REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: X OK: REPLACE: SIZE: CHILLER INSUL. N/A: X OK: REPLACE: SIZE: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPP INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLA					WCT = Absorption	w/ Water Side	Cooling Tower	
COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS: LOOKS OK COMMENTS: LOOKS OK COOLING TOWER N/A: X OK: REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR <td< td=""><td>COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: X OK: REPLACE: SIZE: COOLING TOWER N/A: X OK: REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHILLER INSUL. N/A: X OK: REPLACE: SIZE: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHILLER IN</td><td></td><td></td><td>_</td><td></td><td>Cooling Tower</td><td></td><td></td><td></td></td<>	COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: X OK: REPLACE: SIZE: COOLING TOWER N/A: X OK: REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHILLER INSUL. N/A: X OK: REPLACE: SIZE: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHILLER IN			_		Cooling Tower			
COMP. MOTOR	COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: OK: REPLACE: SIZE: COMMENTS: COMMENTS: CHILLER INSUL. N/A: N/A: N/A: OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	230 V AND	71.4 A	
COMP. MOTOR	COMP. MOTOR	COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: 1.2 CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS: LOOKS OK COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR	COMP. MOTOR	N/A:	OK:	REPLACE:	1			
CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS: LOOKS OK COOLING TOWER N/A: OK: X REPLACE: SIZE: COMMENTS: COMMENTS: COMMENTS: COMMENTS: COMMENTS: COMMENTS: COMMENTS: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS: LOOKS OK COOLING TOWER N/A: OK: X REPLACE: SIZE: COOLING TOWER N/A: X OK: REPLACE: SIZE: COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPL	COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: COMMENTS: LOOKS OK COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: SIZE: SIZE: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR	CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	1.	2	
COMMENTS: LOOKS OK COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	COMMENTS: LOOKS OK COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR	N/A:	ľ	REPLACE:	1			
COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:			
AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	COMMENTS:	LOOKS O	K					
AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	COOLING TOWER	JN/A· X	IOK.	TREPLACE:	ISI7F:			
COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:					LL			
CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:			JOIN. A	INCI DOC.	Joize.			
COMMENTS: CHW PUMP MOTOR	COMMENTS: CHW PUMP MOTOR							·	
COMMENTS: CHW PUMP MOTOR	CHW PUMP MOTOR	CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY	:	
CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PIPE INSUL.							
CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR	N/A: X	OK:	MISSING:	ESTIMAT			
CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X N/A: X	OK:	MISSING: REPLACE: REPLACE:	SIZE:			
CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:			
	CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A:	OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:			
	CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
CHW PUMP SEALS N/A: OK: REPLACE: SIZE:	COMMENTS:	CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			
COMMENTS:		CHW PIPE INSUL. COMMENTS: CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP SEALS CHW PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK: OK: OK:	MISSING: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW AJN

727 CHECKED BY: 727.XLS

	BOILE	R & CON	VERTER -	HVAC UP	PGRAD	E OBSE	RVATI	ONS		
BOILER/CONVERTER NO).	BLR-1	LOCATION	(RM)	MER (E)					
BOILER TYPE:	STM		MFG.:	KEWANEE		MODEL	: M3	35-K60		
CONVERTER TYPE:	STM/HW		MFG.:	5'x10"		MODEL				
STM - Steam			t Water Conv.			TM - High Te			Convertor	
HW - Hot Water			o. HW to HW C	٧.		omestic Hot				
BOILER BURNER	ATMOSPI		POWER:	Χ	OK:		RE	PLACE:		
COMMENTS:	UV SENS	OR								
CT/ACCU FAN MTR	N/A: X	ок:	REPLACE:		SIZE:					
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:		SIZE:					
COMMENTS:										
BLR INSULATION	N/A:	OK: X	MISSING:		ESTIMA1	TED QUANT	ITY:			
PIPE INSULATION	N/A:	OK:	MISSING:	Χ	ESTIMA1	TED QUANT	ITY:		10'@10"	15' @ 6"
COMMENTS:										
HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK: X	REPLACE:		SIZE:	1.5 HP (OLD) CE	NTURY		
HW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:	1.5 HP (OLD) CE	NTURY		
HW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:					
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:					
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:					
HW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:					
HW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:					
COMMENTS:			D AND ASSOIC	CATED PIPING	3 VERY RI	JSTED				4
12.4		L VALVE OK								
CV PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:					
		OK:	REPLACE:		SIZE:					
CV PUMP SEALS	N/A:	1011.								
	N/A:	JON.								
CV PUMP SEALS COMMENTS: CV INSULATION	N/A:	JOK:	MISSING:			FED QUANT				
CV PUMP SEALS COMMENTS:						FED QUANT				
CV PUMP SEALS COMMENTS: CV INSULATION	N/A:	JOK:	MISSING:							
CV PUMP SEALS COMMENTS: CV INSULATION CV PIPE INSUL.	N/A:	JOK:	MISSING:							

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 14 Nov-94

CHECKED BY:

CWW AJN

BLDG:

727

FILE: 727.XLS

BOILER/CONVERTER NO. BLR-2 BOILER TYPE: HW CONVERTER TYPE: STM - Steam to Hot V HW - Hot Water HTHW/HW - High Temp. H BOILER BURNER ATMOSPHERIC: X COMMENTS: ATMOSPHERIC BURNEF CT/ACCU FAN MTR N/A: X OK: COMMENTS: N/A: X OK: COMMENTS: BURNER N/A: X OK: COMMENTS: BOILER RUSTED * SEE AHU-3 * HW PUMP MOTOR HW PUMP SEALS N/A: OK: HW PUMP MOTOR HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: OK: COMMENTS: SUPPLY AREA HAS UNI' SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK: CV PUMP SEALS N/A: X OK: COMMENTS:	HW to HW Cv.	MER SOUTH MODEL: WG-150-D MODEL: HTHW/STM - High Temp HW to Steam Convertor DHW - Domestic Hot Water Convertor OK: REPLACE: IST
BOILER TYPE: HW CONVERTER TYPE: STM - Steam STM/HW - Steam to Hot V HOW - Hot Water HTHW/HW - High Temp. N BOILER BURNER ATMOSPHERIC: X COMMENTS: ATMOSPHERIC BURNER CT/ACCU FAN MTR N/A: X OK: CT/ACCU FAN MTR N/A: X OK: COMMENTS: BLR INSULATION N/A: OK: X PIPE INSULATION N/A: OK: X COMMENTS: BOILER RUSTED * SEE AHU-3 * HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: SUPPLY AREA HAS UNITSHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:	MFG.: /ater Conv. IW to HW Cv. POWER: WITH POWER EXHAU	MODEL: HTHW/STM - High Temp HW to Steam Convertor DHW - Domestic Hot Water Convertor OK: REPLACE: JST
STM - Steam STM/HW - Steam to Hot V HTHW/HW - High Temp. If SOILER BURNER ATMOSPHERIC: X COMMENTS: ATMOSPHERIC BURNER CT/ACCU FAN MTR N/A: X OK: CT/ACCU FAN MTR N/A: X OK: COMMENTS: N/A: X OK: COMMENTS: BOILER RUSTED SEE AHU-3 * HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: SUPPLY AREA HAS UNITED CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:	/ater Conv. IW to HW Cv. POWER: WITH POWER EXHAU	HTHW/STM - High Temp HW to Steam Convertor DHW - Domestic Hot Water Convertor OK: REPLACE: JST
ATMOSPHERIC: X COMMENTS: ATMOSPHERIC BURNEF CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR COMMENTS: COMENTS: COMMENTS: C	W to HW Cv. POWER: WITH POWER EXHAU REPLACE:	DHW - Domestic Hot Water Convertor OK: REPLACE: JST
ATMOSPHERIC: X COMMENTS: ATMOSPHERIC BURNEF CT/ACCU FAN MTR N/A: X OK: CT/ACCU FAN MTR N/A: X OK: CT/ACCU FAN MTR N/A: X OK: COMMENTS: BLR INSULATION N/A: OK: X COMMENTS: BOILER RUSTED SEE AHU-3 * HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: SUPPLY AREA HAS UNI SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:	POWER: WITH POWER EXHAU REPLACE:	OK: REPLACE:
COMMENTS: ATMOSPHERIC BURNEF CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR COMMENTS: BLR INSULATION PIPE INSULATION N/A: COMMENTS: BOILER RUSTED SEE AHU-3 * HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS N/A: COK: HW PUMP MOTOR N/A: COK: HW PUMP MOTOR N/A: COK: HW PUMP MOTOR N/A: COK: HW PUMP MOTOR N/A: COK: HW PUMP MOTOR N/A: COK: N/A: COK: N/A: COK: N/A: COK: COMMENTS: COM	WITH POWER EXHAU	JST
CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: X OK: N/A: X OK: COMMENTS: BLR INSULATION N/A: OK: X PIPE INSULATION N/A: OK: X COMMENTS: BOILER RUSTED SEE AHU-3 * HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: SUPPLY AREA HAS UNI SHEET METAL HAS (4) F	REPLACE:	
### PUMP MOTOR HW PUMP SEALS N/A: OK: COMMENTS: N/A: X OK: X		SIZE:
CT/ACCU FAN MTR N/A: X OK: COMMENTS: N/A: X OK: X BLR INSULATION N/A: OK: X PIPE INSULATION N/A: OK: X COMMENTS: BOILER RUSTED * SEE AHU-3 N/A: OK: OK: N/A: N/A: OK: N/A: N/A: OK: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A		O12L-
BLR INSULATION N/A: OK: X PIPE INSULATION N/A: OK: X COMMENTS: BOILER RUSTED * SEE AHU-3 N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI SHEET METAL HAS (4) F	1127 0 1021	SIZE:
BLR INSULATION N/A: OK: X PIPE INSULATION N/A: OK: X COMMENTS: BOILER RUSTED * SEE AHU-3 N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI SHEET METAL HAS (4) F		
PIPE INSULATION N/A: OK: X COMMENTS: BOILER RUSTED * SEE AHU-3 * HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK		
* SEE AHU-3 * HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X	MISSING:	ESTIMATED QUANTITY:
* SEE AHU-3 * HW PUMP MOTOR N/A: OK:	MISSING:	ESTIMATED QUANTITY:
* HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI'S SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: OK:		
* HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI'S SHEET METAL HAS (4) FOR PUMP MOTOR N/A: X OK: CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:		
HW PUMP SEALS	REPLACE:	SIZE:
HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:	REPLACE:	SIZE:
HW PUMP MOTOR	REPLACE:	SIZE:
HW PUMP SEALS	REPLACE:	SIZE:
HW PUMP MOTOR N/A: OK: HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI' SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:	REPLACE:	SIZE:
HW PUMP SEALS N/A: OK: COMMENTS: SUPPLY AREA HAS UNI SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:	REPLACE:	SIZE:
COMMENTS: SUPPLY AREA HAS UNI'S HEET METAL HAS (4) FOR THE PROOF OF TH	REPLACE:	SIZE:
SHEET METAL HAS (4) F CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:	REPLACE:	SIZE:
CV PUMP MOTOR N/A: X OK: CV PUMP SEALS N/A: X OK:	HEATERS (2) . POWE	ER TRAIN HAS (2)
CV PUMP SEALS N/A: X OK:	AINT SHOP HAS (1)	
CV PUMP SEALS N/A: X OK:	REPLACE:	SIZE:
COMMENTS:	REPLACE:	SIZE:
CV INSULATION N/A: X OK:	MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL. N/A: X OK:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:	L	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0741 BLDG NAME: MNT HANGAR COMB

ELECTRIC METER: N

CONDITIONED SQFT:

38,898

GAS METER: Y
SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 24

TUE: WED: THUR: SUN: MON: FRI: ____0 ____0 PRES START: 0 0 0 24 PRES STOP: 24 24 24 0 ____ _____7 8 7 REQ START: 8 8 0 REQ STOP: 0 17 17 17 17

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

ALD LIANDLING TIMIT CUDVEY ODGEDVATIONS

AIR HANDLING UNIT SURVEY OBSERVATIONS	
BUILDING NUMBER: 0741 AHU NUMBER: AHU-1 AHU LOCATION: BAY	_
REFRIG SYS # SRVNG AHU: NONE SERVES AREA: ALL	
% OF BLDG AREA HEATED: 25	
AHU UNIT TYPE UNIT HEATER NUMBER OF ZONES IF MZ UNIT:	
CFM-HTG: 14,200 CFM-CLG: 0	
MIN %OA: 0 MAX %OA: 0	
NAMEPLATE	
UNIT MFG: MCQUAY UNIT MODEL: 71136-L-1/71136-L-	
SUPPLY FAN HP: 5 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG: DOERR RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: 30004 RET/EXH FAN MTR MODEL:	
COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	-
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	
SCHEDULE	
DAY SCHEDULE NO: 24 MONTH SCHEDULE NO: 1	
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0 0	
PRES STOP: 24 24 24 24 24 24 24	
REQ START: 0 8 7 8 0	
REQ STOP: 0 17 17 15 17 0	
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0	_
PRESENT TEMP WINTR OCC: 65 HOT DECK DEG F: 0 COLD DECK DEG F: 0	
PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0	
PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0	
MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?	N
MAX OA DMPR CONTROL: N ECONOMIZER DB CONTROL: N TIME CLOCK:	N
RET AIR DMPR CONTROL: N ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?	N
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR: CONTROLS COMMENTS:	
TOTAL TOTAL	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

74114 117								
BUILDING NUMBER AHU NUMBER			AHU LOCATIO	ON: BAY				
REFRIG SYS # SRVNG AF	IU: NONE		SERVES AREA	: ALL				
		% OF BLD	G AREA HEATED	:			25	-
AHU UNIT TYPE UNIT H	HEATER		N	NUMBER OF	ZONE	S IF MZ	UNIT:	
CFM-HTG:	14,	200	CFM-CLG	i:		0		
MIN %OA:		0	MAX %OA	:		0		
NAMEPLATE								
UNIT MFG:	MCQUAY		U	NIT MODEL:	711:	36-L1/71	136-L-	
SUPPLY FAN HP:		5	RET/E	XH FAN HP:			0	
SUPPLY FAN MTR MFG:	DOERR		RET/EXH FA!	N MTR MFG:				
SUPPLY FAN MTR MODEL:	30004		RET/EXH FAN N	ITR MODEL:			A - 17-17-	
COMMENTS:								
COILS		11-111						
Coil	Coil Type		Modulatin	g Valve?				
PREHEAT COIL:	NONE							
HEATING COIL:	STEAM							
REHEAT COIL:	NONE							
HUMIDIFIER:	NONE							
COOLING COIL:	NONE							
OOUEDIU E								
SCHEDULE								
DAY SCHEDULE NO:	24			MONTH	SCHE	DULE NO	U:	1
SCHEDULE COMMENTS:								
SUN:	MON: TUE:		iur: Fri:	SAT:				
PRES START: 0	0 0	0	0 0	0				
PRES STOP: 24	24 24	24	2424	24				
REQ START: 0	8 7	8	7 8	0				
REQ STOP: 0	17 17		15 17	0				
MONTHS JAN: FEB:	MAR: APR: N	MAY: JUN:	JUL: AUG:	SEP: (OCT:	NOV:	DEC:	
ON:					\boxtimes	\boxtimes	\boxtimes	
CONTROLS								
TYPE OF CONT	ROLS: ELECTR	IC		RMOSTAT TY		SINGLE	SETPOI	
PRESENT TEMP WINTE	3 OCC:	65		OT DECK DE		; 		0
PRESENT TEMP WINTR U		0		D DECK DE				0
TREGERY TELL VIII.				XED AIR DE				
PRESENT TEMP SUI		0	OTHER SET					0
PRESENT TEMP SUM U	NOCC:	0	OTHER SE	TPOINT DEC	o F:			
MIN OA DMPR CONTROL	.: N MIXI	ED AIR DMPF	R CONTROL:	IMPLEM	ENT C	EMAND	LIMIT C	NTRLS?
MAX OA DMPR CONTROL	_: N ECO	NOMIZER DE	CONTROL: N				TIME	CLOCK:
RET AIR DMPR CONTROL	L: N ECO	NOMIZER WE	CONTROL: N		TIME	CLOCK	OPERAT	IONAL?
EXH AIR DMPR CONTROL	_: N							
OTHER CONTROLS)FSCR·							1
CONTROLS COME								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING NUMBER AHU NUMBER		AUUS 004	TION: DAY	
AND NUMBER	₹. ДПО-3	AHU LOCA	TION: BAY	
REFRIG SYS # SRVNG A	HU: NONE	SERVES AR	EA: ALL	
		% OF BLDG AREA HEAT	ED:	25
AHU UNIT TYPE UNIT	HEATER		NUMBER OF ZONES	S IF MZ UNIT:
CFM-HTG:	14,2	200 CFM-C	LG:	0
MIN %OA:		0 MAX %		0
NAMEPLATE				
UNIT MFG:	MCQUAY		UNIT MODEL: 7113	6-L-1/71136-L-
SUPPLY FAN HP:	to service and a	5 RE	T/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	DOERR	RET/EXH F	AN MTR MFG:	
SUPPLY FAN MTR MODEL:	30004	RET/EXH FAN	MTR MODEL:	COMMISSION OF COMMISSION OF THE COMMISSION OF TH
COMMENTS:			STEVENS PROCESS.	Annual An
COILS				
Coil	Coil Type	Modula	ting Valve?	
PREHEAT COIL:	NONE	П		
HEATING COIL:				
REHEAT COIL:				
HUMIDIFIER:				
COOLING COIL:				
SCHEDULE				
DAY SCHEDULE NO:	24		MONTH SCHED	OULE NO: 1
SCHEDULE COMMENTS:				
SUN:	MON: TUE:	WCD. TIUD FOL	0.17	
PRES START: 0		WED: THUR: FRI:	SAT:	
PRES STOP: 24		0 0 0	0	
REQ START: 0	<u>24</u> <u>24</u> 7	24 24 24	24	
REQ STOP: 0	$\frac{8}{17} = \frac{7}{17} =$	8 7 8 17 15 17	0	
KEROTOI. U		17 13 17	<u> </u>	i
MONTHS JAN: FEB: ON:	MAR: APR: MA	AY: JUN: JUL: AU	G: SEP: OCT:	NOV: DEC:
CONTROLS				
TYPE OF CONT	ROLS: ELECTRIC	ТН	ERMOSTAT TYPE:	INGLE SETPOINT
PRESENT TEMP WINTE	R OCC:	65	HOT DECK DEG F:	0
PRESENT TEMP WINTR U	NOCC:	0	OLD DECK DEG F: MIXED AIR DEG F:	0.
PRESENT TEMP SU	M OCC:	0 OTHER SE	TPOINT DESCRIP:	
PRESENT TEMP SUM U	NOCC:	0 OTHER	SETPOINT DEG F:	0
MIN OA DMPR CONTROL	L: N MIXE	D AIR DMPR CONTROL: [N IMPLEMENT DE	MAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL	-: N ECON	IOMIZER DB CONTROL:	N	TIME CLOCK: N
RET AIR DMPR CONTROL	L: N ECON	OMIZER WB CONTROL:	N TIME C	LOCK OPERATIONAL? N
EXH AIR DMPR CONTROL				
OTHER CONTROLS D)FSCR			1
CONTROLS COMM				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/18/94 PREPARED BY: JM

AIR H	ANDLING UNIT	SURVET UBSERVATIONS
BUILDING NUMBER	ATT	AHU LOCATION: BAY
REFRIG SYS # SRVNG A		SERVES AREA: ALL BLDG AREA HEATED: 25
AHU UNIT TYPE UNIT	HEATER	NUMBER OF ZONES IF MZ UNIT:
CFM-HTG: MIN %OA:	14,200 0	CFM-CLG: 0 MAX %OA: 0
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:	5	UNIT MODEL: 71136-L-1/71136-L- RET/EXH FAN HP: 0 RET/EXH FAN MTR MFG: RET/EXH FAN MTR MODEL:
COILS Coil PREHEAT COIL: HEATING COIL: REHEAT COIL: HUMIDIFIER: COOLING COIL:	STEAM NONE NONE	Modulating Valve?
DAY SCHEDULE NO: SCHEDULE COMMENTS:	24	MONTH SCHEDULE NO: 1
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON: TUE: WED: 0 0 0 24 24 24 8 7 8 17 17 17	THUR: FRI: SAT: 0 0 0 24 24 24 7 8 0 15 17 0
MONTHS JAN: FEB: ON:		UN: JUL: AUG: SEP: OCT: NOV: DEC:
CONTROLS	TROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINT PRESENT TEMP WINTR L PRESENT TEMP SUM L PRESENT TEMP SUM L MIN OA DMPR CONTRO MAX OA DMPR CONTRO RET AIR DMPR CONTRO EXH AIR DMPR CONTRO	R OCC: 65 JNOCC: C M OCC: C JNOCC: C L: N MIXED AIR DM L: N ECONOMIZER L: N ECONOMIZER L: N	HOT DECK DEG F: 0
CONTROLS COM		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: JM

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NU	JMBER:	0741				I	BOILER	RM LOCA	ATION:	MER		
BOILER U	TIV											
SOURCE OF	BLDG HE		BLR/CON	IVERTER	SERVI	ES ARE	A OR SE	RVICE:	ALL			
BOILER	R TAG: R TYPE:	BLR-1 MED PRESS NAT. GAS	S STEAM (1	5# TO 125#	()	CONV	ONVERTE VERTER 'ERTER' HT SOL	TAG:				
CENTRA	L PLANT I	DIRECT										
NAMEPLA	TE				% AF	REA HE	ATED BY	/ BB RAD	DIATION:			0
BOILER MFG: UNIT MODEL: COMMENTS:	4FL675A4	0LB	OR, 2EA	1 HP CO		BLR		PUT (BTU PUT (BTU			5,657,000 7,071,000	
SCHEDULI DAYS SCHEDU		24						MONTH	SECHD	ULE NO:		
SCHEDULE COM												-
PRES START: PRES STOP: REQ START: REQ STOP:	24	MON: 0 24 8 17	TUE: 0 24 7	WED: 24 8)	JR: 0 24 7 15	FRI: 0 24 8 17	SAT: 0 24 0 0				
MONTHS JAN ON:	: FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
CONTROL				<u> </u>			<u></u>		<u></u>			
	F BLR CO RATING SI RNER CO	ETPOINT:	ELECTF		EG F o	r PSIG		RESE	T CONTR	ROLS: [N	
CONT	ROLS CO	MMENTS:										

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY: FILE: 741.XLS

A٠

BLDG: 7

741

Al	R HAND	LING U	NIT - HVAC U	PGRADE	OBSER	/ATION	S	
AHU NO.:	AHU-1-4	LOCATIO	N (Rm) BAY WA	\LL			**	
AHU TYPE:	FC 2P	MFG.:	MCQUAY		MODEL:	71136-L-		
SZ - Single Zone		ating & Vn	•		te 2P for 2	Pipe or 4P	for 4 Pipe)	
MZ - Mulitzone	VAV - Va	riable Air V		eheat Syste				
DD - Dual Duct	UH - Unit	Heater	IND - Inc	luction Sys	tem		ş,	
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:		OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:		OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:		OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:		OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Dan	nper Actuator
							RP-ACT = Repla	ce Actuator
	7	T=	Talani i ala	Total	<u> </u>			
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
	772	1250.445		TOOM ATA	170			
SUPPLY AIR FAN	OK: X		FAN BEARINGS:	COMMEN		EL EGEDO	D)/414 N 410/	
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:		DYNAMICS	<u> </u>
INLET VANES	N/A: X	OK:	COMMENTS:			440V @ (6.8A	
RETURN AIR FAN	ОК:	REPLACE	FAN BEARINGS:	COMMEN		N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	ITS:		0-n-	
COMMENTS:								
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	11	RP- ACT:	
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV		RP- ACT:	
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
						(
REHEAT COIL	N/A: X	ок:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	
	*MANUA	L L				<u> </u>	RP-ACT = Repla	RP-BD:
	*MANUA	L L	REPLACE: 'S FOR OFFICES IN			<u> </u>	RP-ACT = Repla	RP-BD:
	*MANUA	L L				<u> </u>	RP-ACT = Repla	RP-BD:
REHEAT COIL COMMENTS:	*MANUA HAS 6 SI	L NDOW AC	'S FOR OFFICES IN	BAY AREA		<u> </u>	RP-ACT = Repla	RP-BD:
COMMENTS: AHU PUMP MOTOR	*MANUA HAS 6 SI	NDOW AC	'S FOR OFFICES IN	BAY AREA		<u> </u>	RP-ACT = Repla	RP-BD:
COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	*MANUA HAS 6 SI	L NDOW AC	'S FOR OFFICES IN	BAY AREA		<u> </u>	RP-ACT = Repla	RP-BD:
COMMENTS: AHU PUMP MOTOR	*MANUA HAS 6 SI	NDOW AC	'S FOR OFFICES IN	BAY AREA		<u> </u>	RP-ACT = Repla	RP-BD:
COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	*MANUA HAS 6 SI	NDOW AC	'S FOR OFFICES IN	BAY AREA		<u> </u>	RP-ACT = Repla	RP-BD:
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	*MANUA HAS 6 SI N/A: N/A:	IL NDOW AC	'S FOR OFFICES IN REPLACE: REPLACE:	BAY AREA	. CONDENS	SORS IN B	RP-ACT = Replac	RP-BD: ce Actuator e Body
COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	*MANUA HAS 6 SI N/A: N/A:	OK:	'S FOR OFFICES IN REPLACE: REPLACE:	BAY AREA SIZE: SIZE:	. CONDENS	TY:	RP-ACT = Repla	RP-BD: ce Actuator e Body
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	*MANUA HAS 6 SI N/A: N/A:	OK: OK: OK:	'S FOR OFFICES IN REPLACE: REPLACE: MISSING: X MISSING:	BAY AREA SIZE: SIZE: ESTIMAT	CONDENS CON	TY:	RP-ACT = Replac RP-BD = Replac	RP-BD: nce Actuator e Body
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	*MANUA HAS 6 SI N/A: N/A: N/A: LOOKS L	OK: OK: OK:	'S FOR OFFICES IN REPLACE: REPLACE: MISSING: X MISSING: ATION IS BEING RE-	SIZE: SIZE: SIZE: ESTIMAT ESTIMAT DONE. TH	ED QUANTI	TY: TY: ARE ONLY	RP-ACT = Replac RP-BD = Replac 25' @ 4"	RP-BD: ce Actuator e Body EA UNIT
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	*MANUA HAS 6 SI N/A: N/A: N/A: LOOKS L FOR ENT	OK: OK: OK: OK: OK: OK:	'S FOR OFFICES IN REPLACE: REPLACE: MISSING: X MISSING:	SIZE: SIZE: SIZE: ESTIMAT ESTIMAT DONE. TH	ED QUANTI	TY: TY: ARE ONLY	RP-ACT = Replac RP-BD = Replac 25' @ 4"	RP-BD: ce Actuator e Body EA UNIT

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY:

10 Nov-94

CHECKED BY:

CWW AJN

BLDG:

741

FILE:

741.XLS

	BOILE	R & CON	IVERTER - I	HVAC UF	GRAD	E OBSERV	ATIONS	
BOILER/CONVERTER NO).	BLR-1	LOCATION (RM)	MER			
BOILER TYPE:		STM	MFG.:	BURNHAM		MODEL:	4FL-675A-40-LB	
CONVERTER TYPE:			MFG.:			MODEL:		
STM - Steam	STM/HW	- Steam to Ho	ot Water Conv.		HTHW/S	STM - High Temp	HW to Steam Convertor	
HW - Hot Water	HTHW/HV	V - High Tem	p. HW to HW Cv.		DHW - [Domestic Hot Wa	ter Convertor	
BOILER BURNER	ATMOSPI	HERIC:	POWER:	Χ	OK:	Х	REPLACE:	
COMMENTS:	BOILER N	IOT ON AND	IT IS COLD. GA	S HEATER I	N MER.		**************************************	
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:								
	v x							·
BLR INSULATION	N/A:	OK: X	MISSING:		TECTIVIA	TED QUANTITY	· .	
PIPE INSULATION								
	N/A:	OK: X	MISSING:		ESTIMA	TED QUANTITY	•	
COMMENTS:	*******							
LIM BUMB MOTOR	IINI/A. V	IOK:	REPLACE:		TOIZE			
HW PUMP MOTOR HW PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:		SIZE:	•		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:	· · ·		
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:		10111	THE BROLL		OIZE.			
OOMINIERTO,								
CV PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CV PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			-
COMMENTS:			1.12. 0.02.		10,			
OCHRICITO.								

CV INSULATION	N/A: X	OK:	MISSING:		IESTIMA	TED QUANTITY	•	
CV PIPE INSUL.	N/A: X	OK:	MISSING:		<u> </u>	TED QUANTITY		
COMMENTS:		1011.	INTOOTIVO.		LOTIVIA	TEO GOAINITI	•	
OUNIVIENTS.								
						···		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE:** 10/17/94

CLIENT CONTRACT NO: DACA 01-94-D-0033

PREPARED BY: JM

LOCATION: FT. RILEY, KS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NAME: TAC EQUIP SHOP BLDG NUMBER: 0820

ELECTRIC METER: Y

GAS METER: Y SUSPECT ACM: N CONDITIONED SQFT:

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

WED: THUR: TUE: SUN: MON: FRI: _____ 0 0 PRES START: 0 0 0 24 PRES STOP: 24 24 24 24 24 0 9 9 7 9 0 REQ START: 17 17 17 15 REQ STOP: 0

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

, , , , ,	William Collins	OOK ET OBOLK WITHOUT
BUILDING NUMB	ER: 0820	
AHU NUMB	ER: AHU-1	AHU LOCATION: MER
REFRIG SYS # SRVNG	AHU: ACCU-1	SERVES AREA: ALL
	% OF B	LDG AREA HEATED: 45
AHU UNIT TYPE SIN	GLE ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HT0	G: 4,800	CFM-CLG: 4,800
MIN %OA	A: 12	MAX %OA: 100
NAMEPLATE		
UNIT MFC	3: TRANE CLIMATE CHANGE	ER UNIT MODEL: A85F65042
SUPPLY FAN HI		RET/EXH FAN HP: 5
SUPPLY FAN MTR MFC	G: .	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODE	L:	RET/EXH FAN MTR MODEL:
COMMENTS	3:	
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COI	L: NONE	
	L: HOT WATER	
REHEAT COI	L: NONE	
HUMIDIFIER	R: NONE	
COOLING COIL	L: DX	
SCHEDULE		
DAY SCHEDULE NO:	39	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN:	MON: TUE: WED:	THUR: FRI: SAT:
PRES START: 0	0 0 0	0 0 0
PRES STOP: 24	24 24 24	24 24 24
REQ START: 0	9 7 9	7 9 0
REQ STOP: 0	<u>17</u> <u>17</u> <u>17</u>	15 17 0
MONTHS JAN: FEB:	MAR: APR: MAY: JU	JN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: ⊠ ⊠		
CONTROLS		
TYPE OF COI	NTROLS: PNEUMATIC/DDC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WIN	TR OCC: 0	HOT DECK DEG F: 0
PRESENT TEMP WINTR	2	COLD DECK DEG F: 0
PRESENT TEMP S	UM OCC: 0	
PRESENT TEMP SUM		
MIN OA DMPR CONTRO	OL: N MIXED AIR DM	IPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTRO		DB CONTROL: N TIME CLOCK:
RET AIR DMPR CONTRO		WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTRO		THE GEOGRAPHONAL!
OTHER CONTROLS		
OTHER CONTROLS	DEOUK:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING NUMBER: 0820 AHU NUMBER: HV-1		
	AHU LOCATION	I: OFFICES
REFRIG SYS # SRVNG AHU:	SERVES AREA: % OF BLDG AREA HEATED:	OFFICES 20
	% OF BLUG AREA REATED.	20
AHU UNIT TYPE HEATING AND	VENTILATING NU	JMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	3,400 CFM-CLG:	0
MIN %OA:	100 MAX %OA:	100
NAMEPLATE		
UNIT MFG:	UN	IT MODEL:
SUPPLY FAN HP:	3 RET/EX	H FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN	MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MT	R MODEL:
COMMENTS:		
COILS		
Coil	Coil Type Modulating	Valve?
PREHEAT COIL: NONE		
HEATING COIL: HOT W	ATER 🖂	
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: NONE		
SCHEDULE		
DAY SCHEDULE NO: 39		MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:		MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:	TUE: WED: THUR: FRI:	MONTH SCHEDULE NO: 1 SAT:
	TUE: WED: THUR: FRI:	
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0		SAT:
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0	0 0 0 0	SAT: 0
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24	0 0 0 0 24 24 24 24	SAT: 0 24
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17	0 0 0 0 24 24 24 24 7 9 7 9 17 17 15 17	SAT: 0 24 0 0
SCHEDULE COMMENTS:	0 0 0 24 24 24 7 9 7 9 17 17 15 17 APR: MAY: JUN: JUL: AUG:	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS:	0 0 0 0 24 24 24 24 7 9 7 9 17 17 15 17	SAT: 0 24 0 0
SCHEDULE COMMENTS:	0 0 0 24 24 24 7 9 7 9 17 17 15 17 APR: MAY: JUN: JUL: AUG:	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC: \[\begin{array}{ c c c c c c c c c c c c c c c c c c c
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17 MONTHS JAN: FEB: MAR: ON: CONTROLS	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17 MONTHS JAN: FEB: MAR: ON:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17 MONTHS JAN: FEB: MAR: ON:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17 MONTHS JAN: FEB: MAR: ON:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17 MONTHS JAN: FEB: MAR: ON:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC: SINGLE SETPOINT DECK DEG F: 0 DECK DEG F: 0 ED AIR DEG F: 0 DINT DESCRIP: POINT DEG F: 0
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17 MONTHS JAN: FEB: MAR: ON:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 0 SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17 MONTHS JAN: FEB: MAR: ON:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC: SEP: OCT: NOV: DEC: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DEG F: DIMPLEMENT DEMAND LIMIT CNTRLS? N TIME CLOCK: N
SCHEDULE COMMENTS: SUN: MON: PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17 MONTHS JAN: FEB: MAR: ON:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SAT: 0 24 0 0 0 SEP: OCT: NOV: DEC: SEP: OCT: NOV: DEC: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DEG F: DIMPLEMENT DEMAND LIMIT CNTRLS? N TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM AID HANDI ING HAIT CHOVEY ODGEDVATIONS

AIR HAI	NULING UNIT SUR	VEY OBSERVATION	NS CNS
BUILDING NUMBER: AHU NUMBER:		HU LOCATION: MAINT. BAY	
REFRIG SYS # SRVNG AHU:		DVEC ADEA. MAINT DAY	
REFRIG 515 # SKVNG AHU:	: SE % OF BLDG AF	REA HEATED:	20
	78 OF BEDO AT	CATICATED.	20
AHU UNIT TYPE MAKE-UF	P AIR UNIT	NUMBER OF ZONE	S IF MZ UNIT: 0
CFM-HTG:	3,100	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	3	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	RE	T/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: N	IONE		
HEATING COIL: H	IOT WATER		
REHEAT COIL: N	IONE		
HUMIDIFIER: N			
COOLING COIL: N	ONE	Ĺ	
SCHEDULE			
DAY SCHEDULE NO:	39	MONTH SCHE	DULE NO: 1
SCHEDULE COMMENTS:		WONTH COILE	JOLL NO.
SUN: M	ION: TUE: WED: THUR:	: FRI: SAT:	
PRES START: 0	0 0 0 0		<u> </u>
PRES STOP: 24	24 24 24 24	24 24	; !
REQ START: 0	9 7 9 7	9 0	
REQ STOP:0	<u>17</u> <u>17</u> <u>17</u> <u>15</u>	17 0	
MONTHS JAN: FEB: MA	R: APR: MAY: JUN: J	UL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTRO	DLS: ELECTRIC	THERMOSTAT TYPE:	SINGLE SETPOINT
PRESENT TEMP WINTR O	occ: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR UNO		COLD DECK DEG F: MIXED AIR DEG F:	0
PRESENT TEMP SUM O	OCC: 0	OTHER SETPOINT DESCRIP:	<u> </u>
PRESENT TEMP SUM UNO		OTHER SETPOINT DEG F:	0.
MIN OA DMPR CONTROL:	N MIXED AIR DMPR CO	NTROL: N IMPLEMENT DE	EMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL:	Y ECONOMIZER DB CO		TIME CLOCK: N
RET AIR DMPR CONTROL:	Y ECONOMIZER WB CO	NTROL: N TIME C	LOCK OPERATIONAL? N
EXH AIR DMPR CONTROL:	N		
OTHER CONTROLS DES	CR:		
CONTROLS COMMEN			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM

BUILDING NUMBER AHU NUMBER		AHU LOCATION: MAINT. BAY	S
REFRIG SYS # SRVNG AF		SERVES AREA: MAINT. BAYS DG AREA HEATED:	20
AHU UNIT TYPE MAKE	-UP AIR UNIT	NUMBER OF ZON	ES IF MZ UNIT: 0
CFM-HTG:	3,100	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	3	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG: RET/EXH FAN MTR MODEL:	
SUPPLY FAN MTR MODEL: COMMENTS:		REI/EXIT FAN III IN IIIODEL.	
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
	HOT WATER		
REHEAT COIL:	NONE	H	
HUMIDIFIER: COOLING COIL:	NONE NONE	H	
•	NONE	_	
SCHEDULE			
DAY SCHEDULE NO:	39	MONTH SCH	EDULE NO: 1
SCHEDULE COMMENTS:			
SUN:		THUR: FRI: SAT:	
PRES START: 0 PRES STOP: 24	$\frac{0}{24}$ $\frac{0}{24}$ $\frac{0}{24}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
PRES STOP: 24 REQ START: 0	9 7 9	7 9 0	
REQ STOP: 0	17 17 17	15 17 0	
MONTHS JAN: FEB: ON:	MAR: APR: MAY: JUN		NOV: DEC:
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT TYPE: HOT DECK DEG F:	SINGLE SETPOINT 0
PRESENT TEMP WINTS		COLD DECK DEG F:	0
PRESENT TEMP WINTR U	NOCC: 0	MIXED AIR DEG F:	0
PRESENT TEMP SUM PRESENT TEMP SUM U		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	.: N MIXED AIR DMF	PR CONTROL: N IMPLEMENT	DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL	_: Y ECONOMIZER [TIME CLOCK: N
RET AIR DMPR CONTROL EXH AIR DMPR CONTROL		VB CONTROL: N TIME	E CLOCK OPERATIONAL? N
OTHER CONTROLS			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/17/94 PREPARED BY: JM

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N	IUMBER:	0820				BOILER	RM LOCA	ATION:	MER		
30ILER U	NIT				_						
COURCE OF	- DI DO III	A T	BLR/CON	VERTER:	SERVES AF	REA OR SI	ERVICE:	ALL			
SOURCE OF	- BLDG HE	A I									
● ⊠ BOII	-					ONVERT	-				
and the second s	=	BLR-1	050 DE0)			NVERTER	=				 :
	R TYPE:		250 DEG)			IVERTER	-				
	CLIIPE.	NAT. GAS				NV HT SO	URCE:				
CENTRA	AL PLANT D	IRECT							P241000000000000000000000000000000000000		
NAMEPLA	TE		THE PART SAME		% AREA H	EATED B	Y BB RAI	DIATION	:		15
BOILER MFG:	BURNHAN	1			BLR (CAP OUTF	PUT (BTU	H):		2,318,00	0
UNIT MODEL:	4FW-277-4	10-LB			BLI	R CAP INF	UT (BTU	H):		2,898,00	0
COMMENTS:											
											-
SCHEDUL	E										
DAYS SCHED	ULE NO:	39					MONTH	H SECHE	DULE NO	: :	1
SCHEDULE COM	MENTS:									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START		0	0	0	0	0 =	0				
REQ START		= 24	<u>24</u> 7	24	======================================	<u>24</u> =	<u>24</u> 0				:
REQ STOP		17	17	17	15	17	0				
MONTHS IAA	ı. EED.	44.5	4 DD			4110					
MONTHS JAN		MAR:			UN: JUL	AUG:	SEP:	OCT:	NOV:	DEC:	
\boxtimes	\boxtimes	\boxtimes	\boxtimes						\times		
CONTROL	.s										
TYPE C	F BLR CO	NTROLS:	ELECTR	IC			RESE	T CONTI	ROLS: [Y	
OPE	RATING SE	TPOINT:		0 D E	G F or PSIC	3					
TYPE OF BU	JRNER COM	NTROLS:	ļ								
CONT	ROLS COM	MENTS:	JC DSC-	8500 CO	NTROL PAN	EL			.,		
HW PUMP	1										
PUMP TAG	i: 1	1	PUMF	HP:		10	PUMP MF	G: US	ELECTR	IC	
PUMP SERVICE	E: HW PUN	1P				PU	MP MODE	EL: E8	10AU11U	253R112F	=

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: JM

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0820	BLDG NAME: TAC EQUIP SHOP	
REF. UNIT NUMBER/TAG: ACCU-1	LOCATION (MER#):	OUTSIDE
Vanish (1977)	AHU'S SERVED:	: AHU-1
UNIT TYPE AIR CO	DLED CONDENSING UNIT, DX	
NAMEPLATE		
CHILLER MFG: TRANE	TOWER MFG:	
CHILLER MODEL: RAUC-C124-C	# OF TOWER FANS:	3
CHILLER SERIAL NO:	TOWER FAN V:	0
CHILLER V:	TOWER FAN AMPS:	2.7
CHILLER AMPS:	10.7 TOWER FAN HP:	0.75
CHILLER PH:	0	
CHILLER CAP (TONS):	12	
COMMENTS:		
SCHEDULE		
DAYS SCHEDULE NO: 3 SCHEDULE COMMENTS:	9 MONTHS SCHEDULE NO): 2
SUN: MON: TO PRES START: 0 0 PRES STOP: 24 24 REQ START: 0 9 REQ STOP: 0 17	JE: WED: THUR: FRI: SAT: 0 0 0 0 0 24 24 24 24 24 7 9 7 9 0 17 17 15 17 0	
MONTHS JAN: FEB: MAR: APR	MAY: JUN: JUL: AUG: SEP: OG	CT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONTROLS: ELECTR	С	
CWS SETPOINT:	0 CNWS SETPOINT:	0
CWR SETPOINT:	0 CNWR SETPOINT:	0,
PRESS LITE HI: N PRESS LITE LOW: N PRESS GAUGES: N	TEMP LITE HI: N OTHER INDICAT TEMP LITE LOW: N TEMP GAUGES: N	IORS:
CONTROLS COMMENTS:		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

820

FILE:

820.XLS

	AIR	HANDLIN	G UNIT - HVAC I	JPGRADE	OBSERVA	TIONS	
AHU NO.:	MAU-2	LOCATIO	N (Rm)	· · · · · · · · · · · · · · · · · · ·	·		
AHU TYPE:	MAU	MFG.:	TRANE CLIMATE C	HANGER	MODEL:	CCDB06A	ANOD
SZ - Single Zone	H&V - He	ating & Vntltn	g. FC - Fa	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT -	Reheat System			
DD - Dual Duct	UH - Unit	Heater	IND - I	nduction System)		
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:
COMMENTS:	OA & RA	DAMPERS IN	ITERLOCKED. HAS SE	PARATE ACTU	ATOR		DPR-ACT = Damper Actuator
	DAMPER	TO CLOSE C	A LOUVER.			***************************************	RP-ACT = Replace Actuator
	4 UH'S IN	BAY #2					to the state of th
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:							
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:		
INLET VANES	N/A: X	OK:	COMMENTS:	·····			
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A	
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A	
COMMENTS:							

COOLING COIL	N/A: X	lok:	REPLACE:	ISIZE:	CNTLVLV	OK:	RP- ACT: RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT: RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT: RP-BD:
COMMENTS:							RP-ACT = Replace Actuator
	***						RP-BD = Replace Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:					***************************************		
							1107.498
PIPE INSULATION	N/A:	ок: х	MISSING:		ED QUANTITY:		
DUCT INSULATION	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY:		
COMMENTS:							· · · · · · · · · · · · · · · · · · ·

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY: 820.XLS

	AIR H		SUNIT - HVAC U	PGRADE O	BSERVAT	IONS		
AHU NO.:	AHU-1	LOCATIO						
AHU TYPE:	SZ	MFG.:	TRANE CLIMATE CI		MODEL:	CCDB10AE		wa*****
SZ - Single Zone		ating & Vntltng	i i	an Coil (Indicate 2	P for 2 Pipe or	4P for 4 Pipe)		
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	:UH - Unit I	Heater	IND - Ir	nduction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	NO DAMP	ERS SEEN.					DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
			Togo, AG	10.75				
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	ICOMMEN ⁻	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE				EST 5 HP		
INLET VANES	N/A: X	OK:	COMMENTS:	Toommen				
RETURN AIR FAN	OK: X		<u> </u>	COMMEN	Γς.	INLLINE @	~16" IN DIA.	
		REPLACE				-10 114 014.		
RETURN FAN MOTOR	OK: X					EDO AND		
COMMENTS:	· • • • • • • • • • • • • • • • • • • •		N FAN AS AN OUTSIDE		IDE AIR DAMP	ERS AND		
	EXHAUST	DAMPERS.	COULD NOT LOCATE	ON UNIT.				
COOLING COIL DX	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	IRP-BD
HEATING COIL DX	N/A:	OK: X	REPLACE:	SIZE: 3/4	CNTLVLV	OK: X	RP- ACT:	RP-BD
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
COMMENTS:			R TO 8390 IN THE BAY			1	RP-ACT = Replace	
OOMINETYTO.			BAY WITH (1) AHU.	, , , , , , , , , , , , , , , , , , , ,			RP-BD = Replace	
	(4) 011111		<i>B/((1)</i> (1))				10 00 110000	
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				· · · · · · · · · · · · · · · · · · ·
COMMENTS:	N/A:	OK: X	MISSING:	ESTIMATE	D QUANTITY:			
COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: N/A: X	OK: X	MISSING:	i	ED QUANTITY: ED QUANTITY:			

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

820

FILE:

820.XLS

<u> 1777. i </u>	AIR I	HANDLIN	G UNIT - HVAC (JPGRADE (OBSERVA [*]	FIONS		
AHU NO.:	H&V-1	LOCATIO	N (Rm) TOOL I	ROOM				
HU TYPE:	H&V	MFG.:			MODEL:			
Z - Single Zone	:H&V - Hea	ating & Vntltng	j. FC - Fa	n Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe) .	
IZ - Mulitzone	VAV - Var	iable Air Vol.	RHT - F	Reheat System				
D - Dual Duct	UH - Unit I	Heater	IND - Ir	duction System				
).A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
I.A. DAMPER	N/A:	OK: X	OK: X REPLACE:		DPR-ACT	ок:	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
OMMENTS:	OA & RA I	INTERLOCKE	D				DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
ILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
OMMENTS:		1011.7	110.010.	0.22.				
UPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:			
UPPLY FAN MOTOR	ок: х	REPLACE		COMMEN				
NLET VANES	N/A: X	OK:	COMMENTS:	1				
ETURN AIR FAN	OK:	1	FAN BEARINGS:	COMMEN	JTS:	N/A		
ETURN FAN MOTOR	OK:	REPLACE		COMMEN		11//	······································	
OMMENTS:		1		100111111			-	
2001 1110 0011	llaura V	Tour	Toes as	Tours.	I CHELLINA		155	Tan 50
OOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
EATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
REHEAT COIL EHEAT COIL	N/A: X	OK: OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
OMMENTS:						· · · · · · · · · · · · · · · · · · ·	RP-ACT = Replace	
							RP-BD = Replace	Body
HU PUMP MOTOR	N/A; X	OK:	REPLACE:	SIZE:		· · · · · · · · · · · · · · · · · · ·		
HU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:				I				
IDE INCLUATION	UNIZA	lov v	Truconic	Jeografia	ED OUALITIES			
PIPE INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY:			
OUCT INSULATION	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY:			
OMMENTS:								
							•	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

LOCATION: FT. RILEY, KA	NOMO		BLDG:	820		FILE:	820.XLS	AJIN
	415.1	IANDI M			ODOEDVA:		020.ALG	
			141.45	AC UPGRADE	OBSERVA	HONS		
AHU NO.:	MAU-1	LOCATION				···		
AHU TYPE:	MAU	MFG.:	TRANE CLIMA		TYPE: CCI			
SZ - Single Zone	H&V - Hea	ating & Vntltng	i	C - Fan Coil (Indicate	•	4P for 4 Pip	e)	
MZ - Mulitzone	VAV - Var	iable Air Vol.		HT - Reheat System				
DD - Dual Duct	UH - Unit	Heater		ID - Induction Syster				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:				EUMATIC CONTRO			DPR-ACT = Dampe	er Actuator
	ACTUATO	OR ARE DISCO	ONNECTED, OPE	RATES IN RA MOD	E.		RP-ACT = Replace	Actuator
	4 UH'S IN	BAY #1						
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMME	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		СОММЕ	NTS:			
INLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMME	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMME		N/A		****
COMMENTS:	1 HP MOT							
COMMENTO.	1111 1110			*********				
	· ware							
COOLING COIL	N/A: X	JOK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	IRP-BD:
HEATING COIL	N/A: ^	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:GOOD	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
				NTROL VALVE IS	OITTEVEV			
COMMENTS:	DISCONN		TIC LINE TO CO	NIROL VALVE 15			RP-ACT = Replace	
	DISCONN	IECTED					RP-BD = Replace I	500y
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			 	
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
	IN/A. A	JON.	INLITAGE.	JOIZE.				
COMMENTS:								
DIDE BIOLE ATION	INI/A:	TOV: Y	TARCONO	ICOTUA.	TED OLIANITITY			
PIPE INSULATION	N/A:	ОК: Х	MISSING:		TED QUANTITY			
	N/A: X	OK:	MISSING:	JESTIMA	TED QUANTITY	:		
DUCT INSULATION COMMENTS:	1,771. 7							

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

820

BLDG:

FILE: 820.XLS

	REFRIGE	RATION E	QUIPMENT -	HVAC UPGR	ADE OBS	ERVATIONS	
CHILLER / EQUIP. NO.		CH-1	LOCATION (RM)	WEST SIC	E OF BLDG.		
REFG. EQUIP. TYPE:		R-ACCU	MFG.: TRA	ANE	MODEL:	RAUC-C-124-C	
C-WCT = Centrifugal w/				CCU = Reciprocatin	g w/ Air Coole	d Condensing Unit	
R-WCT = Reciprocating		e Cooling Towe		B-WCT = Absorption	w/ Water Side	Cooling Tower	
ACCU = Air Cooled Con			CT :	Cooling Tower			
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	10.7 AMP (@ 460V	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	ОК:	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:			
COMMENTS:							
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:			
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:			
COMMENTS:							
	W						
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATE	ED QUANTITY	· ·	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATE	ED QUANTITY	/·	
COMMENTS:							

	Thus y	Tou	Toroutor	louze			
CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:			
CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:			
CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:			
CHW PUMP SEALS CHW PUMP MOTOR	N/A:	OK:	REPLACE:				
CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:			
	JIV/A.	JON.	TREPLACE.	SIZE.			
COMMENTS:							
			•				
	· · · · · · · · · · · · · · · · · · ·						
					•		
			***************************************				···

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY: FILE:

820.XLS

	1	BLR-1	LOCATION (RM)	MER		
BOILER/CONVERTER NO BOILER TYPE:		HW	MFG.: BURNHAM	IVILIV	MODEL:	4FW-277-40-LB
CONVERTER TYPE:			MFG.:		MODEL:	
STM - Steam	STM/HW	- Steam to Ho	t Water Conv.	HTHW/S	I	o HW to Steam Convertor
HW - Hot Water			o. HW to HW Cv.		omestic Hot Wa	
BOILER BURNER	ATMOSP		POWER: X	OK:	Χ	REPLACE:
COMMENTS:				<u></u>		
						
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
COMMENTS:						
BLR INSULATION	N/A:	OK: X	MISSING:	TESTIMAT	TED QUANTITY	· · · · · · · · · · · · · · · · · · ·
PIPE INSULATION	N/A:	OK: X	MISSING:		TED QUANTITY	
COMMENTS:	IN/A.	JUN. X	IVIIOSIING.	IEST INIA I	ILD QUANTITI	
JOHNNETTO.						
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	N/A:	OK: X	REPLACE:	SIZE:	10 HP 11.5	S. ELECTRIC
HW PUMP MOTOR	IIV/A:	ION, A		JOIZE.	10 111 , 0.0	
HW PUMP SEALS	N/A:	OK: X	REPLACE: X	SIZE:	230V @ 25	
	III .				230V @ 25	
HW PUMP SEALS	N/A:	OK:	REPLACE: X	SIZE:	230V @ 25	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A:	OK:	REPLACE: X REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A:	OK: OK: OK:	REPLACE: X REPLACE: REPLACE:	SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A:	ОК: ОК: ОК: ОК: ОК: ОК:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK: OK: OK: OK:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A:	ОК: ОК: ОК: ОК: ОК: ОК:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A:	ОК: ОК: ОК: ОК: ОК: ОК:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A:	ОК: ОК: ОК: ОК: ОК: ОК: ОК: ОК:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS VERY NOI	5.2A S BAD OR CAVITATING SY PUMP
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A:	ОК: ОК: ОК: ОК: ОК: ОК:	REPLACE: X REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	230V @ 25 BEARINGS	5.2A S BAD OR CAVITATING SY PUMP

820

BLDG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 1470 BLDG NAME: AR VEH MNT SHOP

ELECTRIC METER:

CONDITIONED SQFT:

21,667

GAS METER: Y
SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 11

SUN: MON: TUE: WED: THUR: FRI: SAT: 0 -0 0 0 PRES START: 24 24 24 24 24 24 PRES STOP: 0 7 7 7 7 0 REQ START: 16 16 0 16 0 16 16

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS

EMC NO: 1406-001

AINTIAND	LING UNIT SURVET OBSERVATIONS
BUILDING NUMBER: 1470	
AHU NUMBER: AHU-	1 AHU LOCATION: MER
REFRIG SYS # SRVNG AHU: AC	CU-1 SERVES AREA: OFFICES/CLASSROOM
	% OF BLDG AREA HEATED: 8
AHU UNIT TYPE SINGLE ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	2,500 CFM-CLG : 2,500
MIN %OA:	25 MAX %OA: 25
NAMEPLATE	
UNIT MFG: TRANE	UNIT MODEL: BAUA359C-B
SUPPLY FAN HP:	0.33 RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil	Coil Type Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: HOT W	ATER 🔻
REHEAT COIL: NONE	: 🗖
HUMIDIFIER: NONE	
COOLING COIL: DX	
SCHEDULE	
DAY SCHEDULE NO: 11	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON:	TUE: WED: THUR: FRI: SAT:
PRES START: 0 0	
PRES STOP: 24 24	<u>24</u> <u>24</u> <u>24</u> <u>24</u> <u>24</u> <u>24</u>
REQ START: 0 7	7 7 0
REQ STOP: 0 16	<u>16 16 16 0</u>
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF CONTROLS:	
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL: N TIME CLOCK:
RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	l ()

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

ACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/17/94

LOCATION: FT. RILEY, KS PREPARED BY: JM/AJN/AMS

AIR H	ANDLING UNI	T SURVEY OB	SERVATION	SNC	
BUILDING NUMBER AHU NUMBER		AHU LOCATION	I: MER		- -
REFRIG SYS # SRVNG A		SERVES AREA: OF BLDG AREA HEATED:	ADDITION OFF	TICES 4	
AHU UNIT TYPE SINGL	E ZONE	NU	JMBER OF ZONE	S IF MZ UNIT:	0
CFM-HTG: MIN %OA:	2,000	CFM-CLG: MAX %OA:		2,000 100	
NAMEPLATE					
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:	SNYDER GENERAL 0.33 RESIDENTIAL GAS-FIF	RET/EX RET/EXH FAN RET/EXH FAN MT	H FAN HP: MTR MFG:	G141A020IN 0	
COILS					
PREHEAT COIL: HEATING COIL: REHEAT COIL: HUMIDIFIER: COOLING COIL:	NONE GAS HOT WATER NONE DX				
DAY SCHEDULE NO: SCHEDULE COMMENTS:	11		MONTH SCHE	EDULE NO:	3
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	7 7	D: THUR: FRI: 0 0 0 0 24 24 24 7 7 7 16 16 16	SAT: 0 24 0 0		
MONTHS JAN: FEB: ON:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT:	NOV: DEC:	
CONTROLS TYPE OF CONT	ROLS: ELECTRIC	THERM	MOSTAT TYPE:	SINGLE SETPOIN	
PRESENT TEMP WINTI PRESENT TEMP WINTR U PRESENT TEMP SUI PRESENT TEMP SUM U	R OCC:	0 COLE 0 MIX 0 OTHER SETPO	DECK DEG F: DECK DEG F: DINT DEG F: DINT DESCRIP: POINT DEG F:		0 0 0 0
MIN OA DMPR CONTROI MAX OA DMPR CONTROI RET AIR DMPR CONTROI EXH AIR DMPR CONTROI	MIXED AIF	R DMPR CONTROL: N ZER DB CONTROL: N ZER WB CONTROL: N		DEMAND LIMIT CN TIME C CLOCK OPERATI	CLOCK: N
OTHER CONTROLS D					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/17/94

PREPARED BY: JM/AJN/AMS

			<u> </u>
BUILDING NUMBEI			
AHU NUMBEI	R: MAU-1	AHU LOCATION: MAINT, BAY	
REFRIG SYS # SRVNG A	····	SERVES AREA: MAINT.BAY BLDG AREA HEATED:	5
AHU UNIT TYPE MAKE	E-UP AIR UNIT	NUMBER OF ZON	IES IF MZ UNIT: 0
CFM-HTG:	22,200	CFM-CLG:	0
MIN %OA:		MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	20	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	THE PARTY NAMED AND ADDRESS OF THE PARTY NAMED AND ADDRESS OF	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	A	RET/EXH FAN MTR MODEL:	CHIEF CO. CO. CO. CO. CO. CO. CO. CO. CO. CO.
COMMENTS:	GAS FIRED		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:		- -	
REHEAT COIL:			
HUMIDIFIER:			
COOLING COIL:	NONE	. 🗖	
SCHEDULE		***************************************	
DAY SCHEDULE NO:	11	MONTH SCH	EDULE NO: 1
SCHEDULE COMMENTS:		MONTH SCH	EDOLE NO.
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	7 7 7	7. 7. 0	
REQ STOP: 0	16 16 16	16 16 0	
MONTHS JAN: FEB:	MAR: APR: MAY: J	UN: JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	TROLS: ELECTRIC	THERMOSTAT TYPE:	SINGLE SETPOINT
PRESENT TEMP WINT	R OCC:	HOT DECK DEG F: COLD DECK DEG F:	0
PRESENT TEMP WINTR U	INOCC:	MIXED AIR DEG F:	0
PRESENT TEMP SUI	M OCC:	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM U		OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	L: N MIXED AIR DI	MPR CONTROL: N IMPLEMENT	DEMAND LIMIT CNTRLS? [
MAX OA DMPR CONTROL	L: N ECONOMIZER	R DB CONTROL: N	TIME CLOCK:
RET AIR DMPR CONTROL	L: N ECONOMIZER	WB CONTROL: N TIME	CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL	L: N	- 	•
OTHER CONTROLS	DESCR:		
CONTROLS COMM	MENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

DATE: 10/17/94

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

EMC NO: 1406-001

711111111111111111111111111111111111111	
BUILDING NUMBER: 1470	AUUL COATION MANUT DAVIO
AHU NUMBER: UH-1	AHU LOCATION: MAINT. BAYS
REFRIG SYS # SRVNG AHU: NONE	SERVES AREA: MAINT.BAYS
%	OF BLDG AREA HEATED: 55
AHU UNIT TYPE UNIT HEATER	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: 12,320	CFM-CLG: 0
MIN %OA:	
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP: 1.5	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	The state of the s
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	 :
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	
SCHEDULE	
DAY SCHEDULE NO: 11	MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:	MORTH SCILLDOLE NO.
<u> </u>	
	/ED: THUR: FRI: SAT:
PRES START: 0 0 0	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$
PRES STOP: 24 24 24 24 24 27 7	$\frac{24}{7} = \frac{24}{7} = \frac{24}{7} = \frac{24}{0}$
REQ START: 0 7 7 7 REQ STOP: 0 16 16	$\frac{7}{16} = \frac{7}{16} = \frac{7}{16} = \frac{0}{0}$
KEQ 310F: 0 16 16	10 10 0
MONTHS JAN: FEB: MAR: APR: MAY	: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖾 🖾 🖂 🗖	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F: 0 MIXED AIR DEG F: 0'
PRESENT TEMP SUM OCC:	0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXED A	AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?
	MIZER DB CONTROL: N TIME CLOCK:
	MIZER WB CONTROL: N TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS

Allyliation	PENICO CITIL CONTEL	ODOLINATIONO
BUILDING NUMBER: 14	THE THE PART OF A VANDER CONTRACT OF THE PART OF THE	
AHU NUMBER: UF	I-2 AHU LOC	ATION: WAREHOUSE
REFRIG SYS # SRVNG AHU:	NONE SERVES A	
	% OF BLDG AREA HEA	TED: 20
AHU UNIT TYPE UNIT HEATE	R	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	4,800 CFM	-CLG: 0
MIN %OA:	O MAX	%OA: 0
NAMEPLATE		
UNIT MFG:		UNIT MODEL:
SUPPLY FAN HP:	0.5 R	ET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:		FAN MTR MFG:
SUPPLY FAN MTR MODEL:	······································	AN MTR MODEL:
COMMENTS: TOTA	AL OF 4 FAIN COIL UNITS	
COILS		
Coil	Coil Type Modu	lating Valve?
PREHEAT COIL: NON	E	
HEATING COIL: HOT	WATER	
REHEAT COIL: NON		
HUMIDIFIER: NON		
COOLING COIL: NON	E LI	
SCHEDULE		
DAY SCHEDULE NO: 1	<u>1</u>	MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:		
SUN: MON	: TUE: WED: THUR: FF	RI: SAT:
	0 0 0	0 0
PRES STOP: 24 24	4 24 24 24 2	24 24
	7 7 7 7	<u>7</u> 0
REQ STOP: 0 10	6 16 16 16	16 0
MONTHS JAN: FEB: MAR: ON:	APR: MAY: JUN: JUL: A	NUG: SEP: OCT: NOV: DEC:
CONTROLS		
TYPE OF CONTROLS	: ELECTRIC 1	HERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC	: 0	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC	: 0	COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC	: 0 OTHER S	SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC	: 0 OTHE	R SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL:	N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL:	N TIME CLOCK: N
RET AIR DMPR CONTROL: N		N TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL: N	J	
OTHER CONTROLS DESCR	•	
CONTROLS COMMENTS	:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94
PREPARED BY: JM/AJN/AMS

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER	BUILDING NUMBER: 1470 BOILER RM LOCATION: MER										
BOILER UNIT											
		BLR/CONVE	RTER SERV	/ES ARE	A OR SE	RVICE:	ALL				
SOURCE OF BLDG	HEAT										
■ BOILER					NVERTE					_	
BOILER TAC					/ERTER ERTER 1					_	
BOILER TYP		50 DEG)			HT SOL						
	1011.010										
CENTRAL PLA	NT DIRECT										
NAMEPLATE			% A	REA HEA	ATED BY	BB RAD	IATION:			8	
BOILER MFG: KEWA	ANEF	:		BLR CA	P OUTP	UT (BTU	H):		792,000		
UNIT MODEL: 3R6-F						UT (ВТU			990,000		
COMMENTS:											
SCHEDULE											
DAYS SCHEDULE NO SCHEDULE COMMENT						MONTH	SECHD	ULE NO:		1	
	UN: MON:		WED: TH	UR:	FRI:	SAT:				-	
PRES START:	$\frac{0}{24} = \frac{0}{24}$	24	<u></u>	24	 =	24					
REQ START:	0 7	7	7	7	7	0					
REQ STOP:	0 16	16	16	16	16	0				:	
MONTHS JAN: FI	EB: MAR:	APR: MA	r: JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-	
ON:							\boxtimes	\boxtimes	\boxtimes		
										_	
CONTROLS											
TYPE OF BLR		ELECTRIC				RESE	r contr	ROLS: [Y		
	G SETPOINT:		145 DEG F	or PSIG							
TYPE OF BURNER											
CONTROLS	COMMENTS:										
HW PUMP											
PUMP TAG: 1		PUMP H	P:		2 1	PUMP MF	G: MA	RATHON			
PUMP SERVICE: HW	/ PUMP					MP MODE	EL: YYI	145TTD	R5352AA		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: JM/AJN/AMS

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N	UMBER:	1470				Į	BOILER	RM LOC	ATION:	MER		
BOILER U	NIT											
			BLR/CO	NVERT	ER SER	VES ARE	A OR SE	RVICE:	ALL			
—SOURCE OF	BLDG HE	ΑΤ										
● 図 BOIL	ER					<u>cc</u>	ONVERT	ER				
	ER TAG:	BLR-2			CONVERTER TAG:							
	R TYPE: L TYPE:						ERTER	-				
FUE.			CONV	/ HT SOL	JRCE:							
CENTRA	L PLANT [DIRECT										
IAMEPLA	TE				% A	NREA HE	ATED BY	BB RAI	DIATION			8
BOILER MFG:	KEWANE					BLR CA	AP OUTP	UT (BTU	JH):		792,000	5
UNIT MODEL:	3R6-RO					BLR	CAP INP	UT (BTU	IH):		990,000	<u> </u>
COMMENTS:			***									- .
CHEDUL	E									· - ··· ·		_
DAYS SCHEDU		11						MONT	U CECUE	ULE NO	-	
SCHEDULE COM	=							MONT	n SECHL	JULE NO	·	
	SUN:	MON:	TUE	: WE	D. TU	UR:	FRI:	SAT:				
PRES START		0	102		0 -	0	0	0				
PRES STOP		24	24	= =====	24	24	24 =	<u>=</u> 24				:
REQ START	: 0	7		= = =	7	7	7	0				
REQ STOP	: 0	16	16	5	16	16	16	0				
MONTHS JAN	: FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	<u> </u>
ON: ☑	X	\boxtimes	\boxtimes				П	П	\boxtimes	\boxtimes	\boxtimes	
												
ONTROL	S											
TYPE O	F BLR CO	NTROLS:	ELECT	RIC				RESE	T CONTE	ROLS: [Y	
OPE	RATING SE	TPOINT:		145	DEG F	or PSIG				_		
TYPE OF BU	RNER CO	NTROLS:				3						
CONT	ROLS COM	MENTS:										
IW PUMP												
PUMP TAG	: [1		PUN	IP HP:		- 2	2 F	PUMP ME	G: MA	RATHON		
PUMP SERVICE	: HW PUN	ЛP					PUN	MP MODI	EL: YYI	E145TTD	R5352AA	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NU	JMBER: 1	1470			BL	DG NAME:	AR V	EH MNT	SHOP				
REF. UNIT	NUMBER/	TAG:	ACCU-2					LOCA	TION (MER	#): C	UTSIDE		
								AH	U'S SERVE	D: Ā	HU-2		
	ι	T TINU	YPE A	R COOL	ED CO	NDENSING	UNIT,	DX					
NAMEP	LATE												
Cł	HILLER MF	G: [NTERCIT	Y PROD	UCTS	:		TOWER	MFG:				
CHIL	LER MODE	EL: Ā	/D060H				# OF 1	OWER F	ANS:		1		
CHILLER	SERIAL N	IO: 🧵						OWER F	AN V:			208	
	CHILLER	V: [208		TOWE	R FAN A	MPS:			2.3	
CHI	LLER AMF	PS: =			19.6		TO	WER FA	N HP:			0.33	
(CHILLER F	PH:			0								
CHILLER	CAP (TON	S):			5								
	COMMENT	rs:											
SCHED	ULE												
	YS SCHED			11			MO	NTHS S	CHEDULE I	10:	2		
		SUN:	MON:	TUE	: W	ED: THU	₹:	FRI:	SAT:				
PRES ST	TART:	0	0		0		0	0	0				
PRES S	STOP:	24	24	2		242	4	24	24				
REQ ST	TART:	0	7		7	7	7		0				
REQ S	STOP:	0	16	11	<u> </u>	16 1	6	16	0				
MONTHS	JAN: F	EB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:					\boxtimes	\boxtimes	\boxtimes		\boxtimes				
CONTR	OLS												
TY	PE OF CO	ONTRO	DLS: EL	ECTRIC									
	cws s	SETPO	DINT:			0	CI	NWS SET	POINT:			0	
	CWR S		-			0	C	NWR SET	POINT:			0	
	DD=0		- w. G		TE	AD LITE III.	N	OT	חבם ואוטים.	ATIO			
	PRESS PRESS PRESS		.ow: 🔟		TEMP	MP LITE HI: LITE LOW: P GAUGES:	z z z		HER INDIC	4 HUR			
c	CONTROLS	S CON	IMENTS:	[<u></u> .		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/17/94

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER	R: <u>1470</u>			BL	DG NAM	E: AR V	EH MNT	SHOP			
REF. UNIT NUMB	ER/TAG	: ACCU-1					LOCA.	TION (MER#)	: 0	UTSIDE	
								U'S SERVED	-		
	UNIT	TYPE A	R COOL	ED COI	NDENSIN	IG UNIT,	DX				
NAMEPLAT	ΓΕ										
CHILLER	MEG.	TRANE					TOWER	MEC.			
CHILLER M		RAUC-256	3-Δ			# OF 1	OWER F				1
CHILLER SERIA		10100 201					OWER F				0
	LER V:			208			R FAN A				2.5
CHILLER A	AMPS:		**************************************	9			WER FA				0.33
CHILLE	ER PH:			0							
CHILLER CAP (T	rons):	<u> </u>		5							
001111	ENTO:										
COMM	ENTS:										
SCHEDULE	• •										
DAYS SCH	HEDULE	NO:	11			MO	NTHS S	CHEDULE NO): ·	2	
SCHEDULE (COMME	NTS:									
	SUN	: MON:	TUE	: Wi	ED: TH	IUR:	FRI:	SAT:			······································
PRES START:) 0		<u> </u>	0	0	0	0			
PRES STOP:	24	24	24	1	24	24	24	24			
REQ START:						<u> </u>	7	0			1
REQ STOP:) 16	. 16	<u> </u>	16	16	16	0			:
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP: O	CT:	NOV:	DEC:
ON:				\boxtimes	\boxtimes	\boxtimes	\boxtimes]		
CONTROLS	3										
TYPE OF	CONTR	OLS: EL	ECTRIC			— <u>. </u>					
CW	VS SETF	OINT:			0	CV	IWS SET	POINT:			0
	VR SETF				0		IWR SET				
.	DECC : .	<u></u>									-
	RESS LI		=		IP LITE F	=	ОТН	HER INDICAT	IORS	3:	
	SS LITE ESS GAI	<u> </u>			LITE LOV	=					
				IEMP	GAUGE	э. <u>[N</u>]					
CONTR	OLS CO	MMENTS:									

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

BLDG: **1470** FILE: 1470.XLS

All	R HAND	LING UI	VIT - HV	AC UPGR	ADE	OBSERV	ATION	NS .
AHU NO.:	AHU-1	LOCATIO	N (Rm)	MER (WITH E	BOILERS	3)		
AHU TYPE:	SZ	MFG.:		IT SYSTEM				: BAUA-359C-B
SZ - Single Zone	H&V - He	ating & Vr	ntitng.	FC - Fan Coil	(Indicat	e 2P for 2	Pipe or 4	P for 4 Pipe)
MZ - Mulitzone	VAV - Va	riable Air \	1	RHT - Reheat	-			
DD - Dual Duct	UH - Unit	Heater		ND - Induction	<u></u>			
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZ	ZE:	DPR-ACT	OK: X	RP- ACT:
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZ	ZE:	DPR-ACT	OK: X	RP- ACT:
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZ	ZE:	DPR-ACT	OK:	RP- ACT:
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZ	ZE:	DPR-ACT	OK:	RP- ACT:
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZ	ZE:	DPR-ACT	OK:	RP- ACT:
COMMENTS:								DPR-ACT = Damper Actuator
		•						RP-ACT = Replace Actuator
	-							
FILTER SECTION	N/A: X	OK:	REPLACE:	SIZ	ZE:			
COMMENTS:	CANNOT	ACCESS						
SUPPLY AIR FAN	ок: х	REPLACE	FAN BEARI	NGS: CC	OMMEN ⁻	TS:		
SUPPLY FAN MOTOR	OK: X	REPLACE	:	ico	DMMEN.	TS:		
INLET VANES	N/A: X	ОК:	COMMENT	S:				
RETURN AIR FAN	ОК:	<u> </u>	FAN BEARI		OMMEN	TS:	N/A	
RETURN FAN MOTOR	ок:	REPLACE		<u> </u>	OMMEN.			·
COMMENTS:		1,,,,,,,,,,,						
COMMENTO.				• • •				
COOLING COIL	N/A:	ок: х	REPLACE:	SIZ	7F:	CNTLVLV	OK: X	RP- ACT: RP-BD:
HEATING COIL	N/A:	OK:	FURNACE		ZE:	CNTLVLV		RP- ACT: RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:		ZE:	CNTLVLV		RP- ACT: RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:		ZE:	CNTLVLV		RP- ACT: RP-BD:
COMMENTS:	_!	<u> </u>					<u> </u>	RP-ACT = Replace Actuator
COMMETCIO:				<u> </u>		· · · · · · · · · · · · · · · · · ·		RP-BD = Replace Body
								THE DD - Hepitace Body
		- · ·						
AHU PUMP MOTOR	N/A: X	Ток:	REPLACE:	Isiz	ZE:			
AHU PUMP SEALS	N/A: X	OK:	REPLACE:		ZE:			
COMMENTS:		1	1	1012				
COMMENTS.								
								
PIPE INSULATION	N/A: X	OK:	MISSING:	IFQ	TIMATE	D QUANTI	TY·	
DUCT INSULATION	N/A: X	OK:	MISSING:			D QUANTI		
	IN/A: X	IOK:	TIMISSING:	les	AIVIAIE	D GOANTI	1 7 .	
COMMENTS:								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW AJN

BLDG:

1470

FILE:

CHECKED BY: 1470.XLS

						14/0.XLS	
				DBSERVAT	IONS		
AHU-2		· · ·					
							N
	•	i	,	2P for 2 Pipe or	4P for 4 Pip	e)	
			•				
11					OK:	RP- ACT:	
J.L							
					- 11		, ,
11			l l	1	17		
N/A:	OK:	REPLACE:	SIŽE:	DPR-ACT	OK:	RP- ACT:	
SERVES N	NEW ADDITIO	N ONLY. ELECTR	IC CONTROLS WIT	Ή		DPR-ACT = Dampi	er Actuator
		KED. INPUT = 141	000 BTU/HR, OUTP	PUT =		RP-ACT = Replace	Actuator
111000 BT	U/HR						
N/A:	OK: X	REPLACE:	SIZE:				
JIGU V	IBES TE						
							.,
			COMME	NTS:			
/\							
OK:			COMMEN	NTS:	N/A		
OK:	REPLACE	:	COMME	NTS:			
INI/A+	IOV: V	IDEDLACE:	ICIZE.	CNTLVIV	IOV.	IDD ACT.	RP-BD:
	1				II.		RP-BD:
					II.		RP-BD:
	1			1	H		RP-BD:
	1011	11.0.00		ONTEVEY			
						Nr-bu - Neplace I	500y
N/A: X	ОК:	REPLACE:	SIZE:				
N/A: X	ОК:	REPLACE:	SIZE:				
	<u> </u>						
		W					
		LUCONIO	IESTIMAT	ED QUANTITY:			
N/A:	OK: X	MISSING:					
N/A: N/A:	OK: X	MISSING:		ED QUANTITY:			
	N/A: N/A:	AHU-2 LOCATION MFG.:	AIR HANDLING UNIT - HVAC AHU-2 LOCATION (Rm) ME	AHU-2 LOCATION (Rm) MER MFG.: SNYDER GENERAL H&V - Heating & Vntltng. FC - Fan Coil (Indicate VAV - Variable Air Vol. RHT - Reheat System UH - Unit Heater IND - Induction System N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: SERVES NEW ADDITION ONLY. ELECTRIC CONTROLS WIT RA AND OA INTERLOCKED. INPUT = 141000 BTU/HR, OUTF 111000 BTU/HR N/A: OK: X REPLACE: SIZE: COMMENT	AIR HANDLING UNIT - HVAC UPGRADE OBSERVAT AHU-2 LOCATION (Rm) MER MFG.: SNYDER GENERAL H&V - Heating & Vntltng. FC - Fan Coil (Indicate 2P for 2 Pipe or VAV - Variable Air Vol. RHT - Reheat System UH - Unit Heater IND - Induction System N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT N/A: OK: REPLACE: SIZE: DPR-ACT SERVES NEW ADDITION ONLY. ELECTRIC CONTROLS WITH RA AND OA INTERLOCKED. INPUT = 141000 BTU/HR, OUTPUT = 111000 BTU/HR N/A: OK: X REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: COMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: X OK: REPLACE: SIZE: CNTLVLV N/A: X OK: REPLACE: SIZE: CNTLVLV N/A: X OK: REPLACE: SIZE: CNTLVLV N/A: X OK: REPLACE: SIZE: CNTLVLV N/A: X OK: REPLACE: SIZE: CNTLVLV N/A: X OK: REPLACE: SIZE: CNTLVLV N/A: X OK: REPLACE: SIZE: CNTLVLV	AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS AHU-2 LOCATION (Rm) MER MFG: SNYDER GENERAL MODEL: H&V - Heating & Vntiting. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pip VAV - Variable Air Vol. RHT - Reheat System UH - Unit Heater IND - Induction System N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: DPR-ACT OK: SERVES NEW ADDITION ONLY. ELECTRIC CONTROLS WITH RA AND OA INTERLOCKED. INPUT = 141000 BTU/HR, OUTPUT = 111000 BTU/HR N/A: OK: REPLACE: SIZE: COMMENTS: OK: X REPLACE: SIZE: COMMENTS: OK: X REPLACE: COMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: SIZE: CNTLVLV OK: N/A: OK: REPLACE: SIZE: CNTLVLV OK: N/A: OK: REPLACE: SIZE: CNTLVLV OK: N/A: OK: REPLACE: SIZE: CNTLVLV OK: N/A: OK: REPLACE: SIZE: CNTLVLV OK: N/A: OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK: N/A: X OK: REPLACE: SIZE: CNTLVLV OK:	AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

1470

FILE:

1470.XLS

			G UNIT - HVAC I		CDOLIVVA	10110		
AHU NO.:	ÚH-1-4	LOCATIO		HOUSE	MODE	10151000	5 1 110	
AHU TYPE:	UH	MFG.:	TRANE	0 " (MODEL:	UH5A060		
SZ - Single Zone		ating & Vntltno		an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit			nduction System		Tou	IDD AGE	
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK: OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT DPR-ACT			
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	TYPICAL	OF 4					DPR-ACT = Dampi	
							RP-ACT = Replace	Actuator
EIL TED OFOTION	INI/A: V	TOV:	IREPLACE:	SIZE:				
FILTER SECTION	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
OLIDDI V AID EAN	NOV: V	IDED! ACT	FAN BEARINGS:	COMMEN	ITC.			
SUPPLY AIR FAN	OK: X					·		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	115:			
INLET VANES	N/A: X	OK:	COMMENTS:					
				T = = :				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN		N/A		
RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE REPLACE		COMMEN		N/A		
RETURN AIR FAN RETURN FAN MOTOR				i		N/A		
RETURN AIR FAN RETURN FAN MOTOR				i		N/A		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	ок:	REPLACE		COMMEN	ITS:			
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK:	REPLACE	REPLACE:	COMMEN	CNTLVLV	OK:	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	N/A: X N/A:	OK: OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: NONE	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: X N/A: N/A: X	OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A:	OK: OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: NONE	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: X	OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: X	OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: X	OK: OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X	OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLY	OK: NONE OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: NONE OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

1470 BLDG: FILE: 1470.XLS AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS AHU NO.: LOCATION (Rm) CEILING OF FARTHEST BAY AHU TYPE: MAU MFG.: CANNOT ACCESS MODEL: FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe) SZ - Single Zone H&V - Heating & Vntltng. MZ - Mulitzone VAV - Variable Air Vol. RHT - Reheat System DD - Dual Duct UH - Unit Heater IND - Induction System O.A. DAMPER REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: X R.A. DAMPER DPR-ACT RP- ACT: N/A: X OK: REPLACE: SIZE: OK: E.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: RP- ACT: F. & B. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: ZONE DAMPER OK: N/A: X REPLACE: SIZE: DPR-ACT OK: RP-ACT: COMMENTS: NATURAL GAS FIRED MAU. FOUR UNIT HEATERS (REZNER) DPR-ACT = Damper Actuator IN FAR BAYS. RP-ACT = Replace Actuator FILTER SECTION N/A: OK: REPLACE: SIZE: COMMENTS: CANNOT SEE SUPPLY AIR FAN REPLACE FAN BEARINGS: COMMENTS: OK: SUPPLY FAN MOTOR OK: REPLACE: COMMENTS INLET VANES N/A: X OK: COMMENTS: RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: RETURN FAN MOTOR REPLACE: COMMENTS: COMMENTS: (6) UNIT HEATERS IN MAIN BAY AREA. BASEBOARD RADIATION IN ALL OTHER AREAS. COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV RP- ACT: RP-BD: OK: HEATING COIL N/A: OK: X RP-BD: **FURNACE** SIZE: CNTLVLV OK: RP- ACT: PREHEAT COIL N/A: X OK: SIZE: CNTLVLV OK: RP- ACT: RP-BD: REPLACE: REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-BD: COMMENTS: GE ZONE LINE HEAT PUMP IN OFFICE IN BAY AREA. 2 UNIT HEATERS RP-ACT = Replace Actuator IN PARTS STORAGE RP-BD = Replace Body SIZE: AHU PUMP MOTOR REPLACE: N/A: X OK: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION MISSING: ESTIMATED QUANTITY: N/A: X OK: DUCT INSULATION N/A: X OK: MISSING: **ESTIMATED QUANTITY:** COMMENTS:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG: **1470**

FILE:

1470.XLS

	REFRIGE	RATION I	EQUIPMENT - H	VAC UPGRADE OBSERVATIONS	
CHILLER / EQUIP. NO.		CH-1	LOCATION (RM)	OUTSIDE BLDG. NORTH	
REFG. EQUIP. TYPE:		R-ACCU		KE HIGH EFF. MODEL:	
C-WCT = Centrifugal w/	Water Side Co	ooling Tower		U = Reciprocating w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating		Cooling Towe	i i	VCT = Absorption w/ Water Side Cooling Tower	
ACCU = Air Cooled Cond	densing Unit		CT = 0	Cooling Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:		1011171	1		
OOMINENTO.					
CHILLER INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHVV FUIVIF SEALS			T===:		
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
	N/A: X N/A: X	OK: OK:	REPLACE:	SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

1470

FILE:

1470.XLS

CHILLER / EQUIP. NO. REFG, EQUIP. TYPE: R-ACCU MFG: TRANE MODEL: RAUC-256-A C-WCT = Centrifugal w/ Water Side Cooling Tower R-ACCU = Reciprocating w/ Air Cooled Condensing Unit R-WCT = Reciprocating w/ Water Side Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower COMP. MOTOR N/A: N/A:	Water Side nsing Unit N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	R-ACCU cooling Tower cooling Tower Cooling T	MFG.: TRANE R-ACCU = er ASB-WCT CT = Cool REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	MODEL: RAUC-256-A = Reciprocating w/ Air Cooled Condensing Unit = Absorption w/ Water Side Cooling Tower ling Tower SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
C-WCT = Centrifugal w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower ACCU = Reciprocating w/ Water Side Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower CT = Co	Water Side nsing Unit N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK: OK:	R-ACCU = er ASB-WCT CT = Cool REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	= Reciprocating w/ Air Cooled Condensing Unit = Absorption w/ Water Side Cooling Tower ling Tower SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
ASB-WCT = Absorption w/ Water Side Cooling Tower	Water Side nsing Unit N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	= Absorption w/ Water Side Cooling Tower ling Tower SIZE:	
ACCU = Air Cooled Condensing Unit COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: X OK: COMP. MOTOR N/A: X OK: COMP. MOTOR N/A: X OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: X OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: X OK: REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: OK: REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: N/A: OK: MISSING: ESTIMATED QUANTITY: CHIM PIPE INSUL. N/A: OK: REPLACE: SIZE: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHILLER INSUL. N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP SEALS N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N/A: N/A: OK: REPLACE: SIZE: CHIM PUMP MOTOR N/A: N	nsing Unit N/A: N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK: OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE	
COMP. MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMP. MOTOR	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMP. MOTOR N/A: X OK: REPLACE: SIZE: COMP. MOTOR N/A: X OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: X OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: X OK: REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: COOLING TOWER N/A: OK: REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	N/A: X N/A: X N/A: N/A: N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	
COMP. MOTOR	N/A: X N/A: N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	
CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: X OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: X OK: REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: OK: REPLACE: SIZE: COOLING TOWER N/A: OK: X REPLACE: SIZE: COOLING TOWER N/A: OK: X REPLACE: SIZE: COOLING TOWER N/A: OK: X REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: SIZE: SIZE: CHW PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: COMMENTS: COMMENTS: COMMENTS: SIZE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: <td< td=""><td>N/A: X N/A: X N/A: X N/A: X</td><td>OK: X OK: OK:</td><td>REPLACE: REPLACE: REPLACE:</td><td>SIZE: SIZE: SIZE:</td><td></td></td<>	N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
CT/ACCU FAN MTR	N/A: X N/A: X N/A: X N/A:	OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
COMMENTS: COMMENTS: COOLING TOWER	N/A: X N/A: N/A:	OK:	REPLACE:	SIZE: SIZE:	
COMMENTS: COOLING TOWER N/A: OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	N/A: N/A:	OK:	REPLACE:	SIZE:	
COOLING TOWER N/A: OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	N/A:				
AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	N/A:				
AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	N/A:				
CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:		O.S. A	11.01.01.	10,22.	
CHILLER INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	NI/A: V				
CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	NI/A· V				
CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	il V/A. A	IOK.	IMISSING:	IESTIMATED QUANTITY:	
CHW PUMP MOTOR					*******
CHW PUMP MOTOR					
CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:					
CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:				· · · · · · · · · · · · · · · · · · ·	
CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	NI/A · Y	IOK:	IDEDLACE:	ICIZE:	
CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE: CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:		I		1	
CHW PUMP SEALS N/A: X OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:					
CHW PUMP MOTOR N/A: X OK: REPLACE: SIZE:				I	
			_1		
	L				
		[

	· · · · · · · · · · · · · · · · · · ·				
CHW PUMP MOTOR CHW PUMP SEALS		N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK: N/A: X OK:	N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE: N/A: X OK: REPLACE:	N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE: N/A: X OK: REPLACE: SIZE:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

14 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE:

1470.XLS

	BLR-1&2	LOCATION	(DM)	MED			
		ILOUATION	(KM)	MER			
	HW	MFG.:	KEWANEE		MODEL:	3R6-KO	
		MFG.:			MODEL:		
STM/HW -	Steam to Hot	Water Conv.		1	•	p HW to Steam Convertor	
		HW to HW Cv	1.	DHW - De	omestic Hot Wa		
ATMOSPH	HERIC:	POWER:	Χ	OK:	Χ	REPLACE:	
Watte V	Tour	IDEDI JOS		Tour			
R	1			1			
E1			DUMPC O		······································		
OVERALL	CONDITION (OF BOILERS	& PUMPS = G	000	····		
					• • • • • • • • • • • • • • • • • • • •		
IN/A·	IOK: X	IMISSING:		IESTIMAT	TED QUANTIT	Y:	
JIN/A.	JOIN. X	IVIIOOIIVO.		LOTHIN C	LD QOMMIN		
					· .		
ΙΝ/Δ·	IOK: X	IREPLACE:		ISIZE:	2 HP MAR	ATHON ELECTRIC	
15				I			
JL					2 HP		
				SIZE:			
<u> </u>		_1		ISIZE:			
11		f		SIZE:			
				SIZE:			
N/A:	OK:	REPLACE:		SIZE:			
<u> </u>		,					
	· · · · · · · · · · · · · · · · · · ·						
N/A: X	OK:	REPLACE:		SIZE:			
N/A: X	OK:	REPLACE:		SIZE:			
	<u></u>						

N/A: X	OK:	MISSING:		ESTIMA	TED QUANTIT	Y:	
N/A: X	OK:	MISSING:		ESTIMA	TED QUANTIT	Y:	
<u> </u>				<u> </u>			
<u>-</u>							
	HTHW/HV ATMOSPF N/A: X N/A: X OVERALL N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A	HTHW/HW - High Temp. ATMOSPHERIC: N/A: X OK: N/A: X OK: OVERALL CONDITION N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: X N/A: OK: OK: X N/A: OK: OK: X N/A: OK: OK: OK: OK: OK: OK: OK: OK: OK: OK	HTHW/HW - High Temp. HW to HW CV ATMOSPHERIC: POWER: N/A: X	N/A:	N/A:	N/A:	N/A: OK: REPLACE: SIZE: OK: X REPLACE: N/A: OK: REPLACE: SIZE: OVERALL CONDITION OF BOILERS & PUMPS = GOOD N/A: OK: MISSING: ESTIMATED QUANTITY: N/A: OK: REPLACE: SIZE: OVERALL CONDITION OF BOILERS & PUMPS = GOOD N/A: OK: MISSING: ESTIMATED QUANTITY: N/A: OK: X MISSING: ESTIMATED QUANTITY: N/A: OK: X REPLACE: SIZE: 2 HP MARATHON ELECTRIC N/A: OK: X REPLACE: SIZE: 2 HP MARATHON ELECTRIC N/A: OK: X REPLACE: SIZE: SIZE: N/A: OK: X REPLACE: SIZE: N/A: OK: N/A: OK: N/A: OK:
1470

BLDG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 11/9/94
PREPARED BY: CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7176 BLDG NAME: MOTOR POOL MNT SHOP

ELECTRIC METER: N

GAS METER: N SUSPECT ACM: Y CONDITIONED SQFT:

4,880

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 7

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	0	9	8	9	12	9	0
REQ STOP:	0	17	17	17	15	17	0

REMARKS:

SUSPECT ACM LOCATED ON ALL STEAM AND CONDENSATE PIPE

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 11/9/94

PREPARED BY: CWW

BUILDING NUMBEF AHU NUMBEF			AHU LOCATIO	N: CEILING M	OUNTED		
REFRIG SYS # SRVNG AI	HU:		SERVES AREA	: ALL		:	
		% OF BLDG	AREA HEATED	•		22	_
AHU UNIT TYPE UNIT I	HEATER		N	IUMBER OF ZOI	NES IF MZ	UNIT: 0	
CFM-HTG: Min %OA:		8,250 0	CFM-CLG MAX %OA		0		_
NAMEPLATE							
UNIT MFG:	MODINE		UI	NIT MODEL:			
SUPPLY FAN HP:		0.5	RET/E	XH FAN HP:		0	
SUPPLY FAN MTR MFG:	AND COLUMN TO THE PARTY OF THE	·	RET/EXH FAI				
SUPPLY FAN MTR MODEL: COMMENTS:	TOTAL FOR 5 U		RET/EXH FAN M	TR MODEL:			
COILS	<u>'</u>						
Coil	Coil Typ	e	Modulating	g Valve?			
PREHEAT COIL:	NONE						
HEATING COIL:	STEAM						
REHEAT COIL:	NONE						
HUMIDIFIER:			_ 📙				
COOLING COIL:	NONE		U				
CHEDULE							
DAY SCHEDULE NO:	7		·····	MONTH SCI	IEDULE NO	D: 1	
	7			MONTH SCH	EDULE NO	D: <u>1</u>	
DAY SCHEDULE NO:	7 MON: TUE:	WED: TH	UR: FRI:	MONTH SCH	EDULE NO	D: 1	
DAY SCHEDULE NO: SCHEDULE COMMENTS:		·	UR: FRI:		HEDULE NO	D: 1	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE: 0 0 24 24	24	0 0 24	SAT: 0 24	IEDULE NO	D: 1	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0	MON: TUE: 0 0 24 24 9 8	24	0 0 24 24 12 9	SAT: 0 24 0	EDULE NO	D: 1	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE: 0 0 24 24	0 24 9	0 0 24	SAT: 0 24	IEDULE NO	D: 1	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB:	MON: TUE: 0 0 24 24 9 8	24	0 0 24 24 12 9	SAT: 0 24 0		D: 1	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MON: TUE: 0 0 24 24 9 8 17 17	9 17	0 0 24 24 12 9 15 17	SAT: 0 24 0 0			
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MON: TUE: 0 0 24 24 9 8 17 17 MAR: APR:	0 24 9 17	0 0 24 24 12 9 15 17 JUL: AUG:	SAT: 0 24 0 0 0 SEP: OCT	: NOV:	DEC:	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MON: TUE:	0 24 9 17 MAY: JUN:	0 0 24 24 12 9 15 17 JUL: AUG:	SAT: 0 24 0 0 0 SEP: OCT	NOV:	DEC:	
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ STOP: OREQ STOP: ON: CONTROLS	MON: TUE:	0 24 9 17 MAY: JUN:	0 0 24 24 12 9 15 17 JUL: AUG:	SAT: 0 24 0 0 SEP: OCT SEP: OCT DECK DEG F: D DECK DEG F:	NOV: ☑ SINGLE	DEC: SETPOINT 0 0	
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PREQ START: REQ STOP: O MONTHS JAN: FEB: ON: ON: TYPE OF CONT PRESENT TEMP WINTR U	MON: TUE: 0 0 24 24 9 8 17 17 MAR: APR: ☑ ☑ ROLS: ELECTION	0 24 9 17	0 0 24 24 12 9 15 17	SAT: 0 24 0 0 SEP: OCT SEP: OCT DECK DEG F: DECK DEG F: KED AIR DEG F:	NOV: ☑ SINGLE	DEC: SETPOINT 0	
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ START: OREQ STOP: OREQ STOP: ON: CONTROLS TYPE OF CONTROLS	MON: TUE: 0 0 0 24 24 9 8 17 17 MAR: APR:	0 24 9 17	0 0 24 24 12 9 15 17 JUL: AUG: THER HO COLL MIX OTHER SETP	SAT: 0 24 0 0 SEP: OCT SEP: OCT DECK DEG F: D DECK DEG F:	NOV: ☑ SINGLE	DEC: SETPOINT 0 0	
DAY SCHEDULE NO: SCHEDULE COMMENTS: PRES START: PRES STOP: PRES STOP: PREQ START: OREQ STOP: OREG STOP: OREQ STOP: OREG	MON: TUE: 0 0 0 24 24 9 8 17 17 MAR: APR:	0 24 9 17	O O 24 24 24 12 9 15 17 JUL: AUG:	SAT: 0 24 0 0 SEP: OCT SEP: OCT DECK DEG F: DECK DEG F: CED AIR DEG F: OINT DESCRIP: TPOINT DEG F:	SINGLE	DEC: SETPOINT 0 0 0 0	S? N
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PRES STOP: PREQ START: OREQ STOP: OREG STOP:	MON: TUE: 0 0 24 24 9 8 17 17 MAR: APR: CROCS: ELECTION ROCC: NOCC: NOCC: NOCC: NOCC: NOCC: NOCC: NOCC:	0 24 9 17	0 0 24 24 12 9 15 17	SAT: 0 24 0 0 0 SEP: OCT SEP: OCT DECK DEG F: DECK DEG F: CED AIR DEG F: OINT DESCRIP: TPOINT DEG F:	SINGLE	DEC: SETPOINT 0 0 0 0	
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: OREQ STOP: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM U PRESENT TEMP SUM U MIN OA DMPR CONTROL	MON: TUE: 0 0 0 24 24 9 8 17 17 MAR: APR: X TROLS: ELECTION R OCC: NOCC: N	0 24 9 17	O O O 24 24 24 12 9 15 17 JUL: AUG:	SAT: 0 24 0 0 0 SEP: OCT SEP: OCT DECK DEG F: CED AIR DEG F: CE	SINGLE	DEC: SETPOINT 0 0 0 0 LIMIT CNTRL	K: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 11/9/94

PREPARED BY: CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER: 7176	BOILER RM LOCATION: MER
BOILER UNIT	
	TER SERVES AREA OR SERVICE: ALL
SOURCE OF BLDG HEAT	
● BOILER	CONVERTER
BOILER TAG: BLR-1	CONVERTER TAG:
BOILER TYPE: LOW PRESS STEAM (<15#)	CONVERTER TYPE:
FUEL TYPE: NAT. GAS	CONV HT SOURCE:
CENTRAL PLANT DIRECT	
AMEPLATE	% AREA HEATED BY BB RADIATION: 0
BOILER MFG: NATIONAL RADIATOR	BLR CAP OUTPUT (BTUH): 1,000,000
UNIT MODEL: 6-66	BLR CAP INPUT (BTUH): 1,250,000
COMMENTS:	
CHEDULE	
DAYS SCHEDULE NO: 7 CHEDULE COMMENTS:	MONTH SECHDULE NO: 1
SUN: MON: TUE: W	VED: THUR: FRI: SAT:
PRES START: 0 0 0	0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 9 8	9 12 9 0
REQ STOP: 0 17 17	<u>17' _ 15 </u>
MONTHS JAN: FEB: MAR: APR: MAY	: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖂 🖂 🖂	
ONTROLS	
TYPE OF BLR CONTROLS: ELECTRIC	, RESET CONTROLS: N
OPERATING SETPOINT:	DEG F or PSIG
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	
CONTINUES COMMENTS.	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: AJN NLA

BLDG:

7176

FILE:

7176.XLS

	AIR I	HANDLIN	IG UNIT - HV	AC UPGRADE	OBSERVA [®]	TIONS	······································	· · · · · · · · · · · · · · · · · · ·
AHU NO.:	UH-1	LOCATIO	DN (Rm) C	EILING (13' TO BOT	TOM OF UNIT)			
AHU TYPE:	UNIT HEAT	ER MFG.:	MODINE		MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltn	igF	C - Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	:)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	F	RHT - Reheat System				
DD - Dual Duct	UH - Unit	Heater	.11.	ND - Induction System	1			
D.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	MANUAL	ON/OFF SW	ITCH FOR UH'S IN	BAY AREA			DPR-ACT = Damp	er Actuator
	11.						RP-ACT = Replac	e Actuator
	***	·····						
FILTER SECTION	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:							······································	
SUPPLY AIR FAN	OK: X		E FAN BEARINGS:					
SUPPLY FAN MOTOR	OK: X	REPLAC		COMME	NTS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		E FAN BEARINGS		COMMENTS: N/A			
RETURN FAN MOTOR	OK:	REPLAC	E:	COMME	VTS:	N/A		
COMMENTS:								
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK: N/A	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: N/A	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK: N/A	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK: N/A	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replac	e Actuator
							RP-BD = Replace	Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:		*						
PIPE INSULATION	IINI/A	TOV:	MICCINO	V Inother	TO OURSITIES!			
DUCT INSULATION	N/A:	OK:		<u>-</u>	ED QUANTITY:			
	N/A: X	OK:	MISSING:		ED QUANTITY:			
COMMENTS:	NO PIPE	INSULATION	I - INSULATION IS	NOT NECESSARY, F	PIPE USED TO	HEAT BLDG.		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

9 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7176

FILE:

7176.XLS

OILER/CONVERTER NO)	BLR-1	LOCATION (RM)	MER			
BOILER TYPE:	· .	STM	MFG.:	restant V	MODEL:		
CONVERTER TYPE:			MFG.: NAT-U.S. RADIATOR, C	RANE CO	MODEL:		Jun-66
STM - Steam	STM/HW	- Steam to Ho	Water Conv.		TM - High Ter	mp HW to	Steam Convertor
HW - Hot Water			. HW to HW Cv.		omestic Hot V		
BOILER BURNER	ATMOSP	HERIC: X	POWER:	OK:	Χ	REPL	ACE:
COMMENTS:	BOILER I	SOLD & RUS	TED				
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:							
	16.774	101/ 1/2	J. 11000110	I CATULL	TED OUALITE	TV.	
BLR INSULATION	N/A:	OK: X*	MISSING:		FED QUANTI		
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMA	TED QUANTI	IY:	
COMMENTS:	*ACM INS	ULATION					
	Thua. V	Tork	IDEDI ACE.	SIZE:			
HW PUMP MOTOR	N/A: X N/A: X	OK:	REPLACE:	SIZE:			······································
HW PUMP SEALS		lok:	REPLACE:	SIZE:			
HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE:			
	N/A:	OK:	REPLACE:	SIZE:			
	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR		OIX.					
HW PUMP SEALS		IOK.	REDIACE:	SIZE			
HW PUMP SEALS HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS		OK: OK:	REPLACE:	SIZE: SIZE:			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A:	3		1			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A:	3		1			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR	N/A: N/A:	3		1			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR	N/A: N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE:			
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A: N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	TED QUANTI	TY:	
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS	N/A: N/A:	OK:	REPLACE:	SIZE: SIZE: SIZE:	TED QUANTI		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

DATE: 10/17/94

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7920 **BLDG NAME: VEH MNT SHOP DS**

ELECTRIC METER: N

GAS METER: N

SUSPECT ACM: N

CONDITIONED SQFT:

124,553

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

SUN: MON: TUE: WED: THUR: FRI: SAT: 0 ____ 0 0 0 0 PRES START: 24 24 24 24 24 24 PRES STOP: 0 7 7 9 0 9 9 **REQ START:** 17 17 __0 17 17 15

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS

AIR HANDLING LINIT SLIDVEY ORSEDVATIONS

AIR II	ANDLING UNIT 3	UKVET UBSEKVATI	ONS
BUILDING NUMBER			
AHU NUMBER	l: AHU-1	AHU LOCATION: MER	
REFRIG SYS # SRVNG AF	IU: ACCU-1	SERVES AREA: OFFICES - WI	NG A
	% OF BLE	DG AREA HEATED:	2.5
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZON	ES IF MZ UNIT: 0
CFM-HTG:	1,200	CFM-CLG:	1,200
MIN %OA:	10	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	2	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	The desiration of a latest resident and an experimental state of the first terminal and the state of the stat
COMMENTS:	GAS - FIRES; 27,000 BTUH II	NPUT; 21,600 BTUH OUTPUT	
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
REHEAT COIL:	NONE	. 🗆	
HUMIDIFIER:	NONE		
COOLING COIL:	DX		
SCHEDULE			
DAY SCHEDULE NO:	55	MONTH SCH	EDULE NO: 3
SCHEDULE COMMENTS:			· · · · · · · · · · · · · · · · · · ·
SUN:	MON: TUE: WED: T	THUR: FRI: SAT:	
PRES START:0	0 0 0	0 0 0	1
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	9 7 9	7 9 0	
REQ STOP: 0	171717	15 17 0	
	MAR: APR: MAY: JUN	: JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT TYPE:	SINGLE SETPOINT
PRESENT TEMP WINTE	ROCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR U		COLD DECK DEG F: MIXED AIR DEG F:	0
PRESENT TEMP SUN	M OCC: 0	OTHER SETPOINT DESCRIP:	<u> </u>
PRESENT TEMP SUM UI		OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	: N MIXED AIR DMP	R CONTROL: N IMPLEMENT	DEMAND LIMIT CHTRLS?
MAX OA DMPR CONTROL			TIME CLOCK:
RET AIR DMPR CONTROL		=	CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL	: N	<u> </u>	· -
OTHER CONTROLS D	ESCR:		
CONTROLS COMM	ENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS

, , , , , , , , , , , , , , , , , , , ,			
BUILDING NUMBE		AHU LOCATION: MER	
REFRIG SYS # SRVNG A		SERVES AREA: OFFICES WING DG AREA HEATED:	2.5
AHU UNIT TYPE SING	LE ZONE	NUMBER OF ZONE	S IF MZ UNIT: 0
CFM-HTG:	1,575	CFM-CLG: 1	,575
MIN %OA:		MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	2	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:	GAS FIRED; 45,000 BTUH IN	IPUT; 36,700 BTUH OUTPUT	
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	GAS		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	DX		
SCHEDULE			
DAY SCHEDULE NO:	55	MONTH SCHE	DULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	9 7 9	7 9 0	:
REQ STOP: 0	17 17 17	15 17 0	
MONTHO IAN EED	MAR: APR: MAY: JUN	I: JUL: AUG: SEP: OCT:	NOV: DEC:
MONTHS JAN: FEB:			
CONTROLS			
TYPE OF CON	TROLS: ELECTRIC		SINGLE SETPOINT
PRESENT TEMP WINT	R OCC: 0	HOT DECK DEG F: COLD DECK DEG F:	<u>0</u>
PRESENT TEMP WINTR U	JNOCC: 0	MIXED AIR DEG F:	0
PRESENT TEMP SU	M OCC: 0	OTHER SETPOINT DESCRIP:	V
PRESENT TEMP SUM (OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTRO	L: N MIXED AIR DMF	PR CONTROL: N IMPLEMENT D	EMAND LIMIT CNTRLS?
MAX OA DMPR CONTRO		DB CONTROL: N	TIME CLOCK:
RET AIR DMPR CONTRO	—	VB CONTROL: N TIME	CLOCK OPERATIONAL?
EXH AIR DMPR CONTRO			<u></u>
OTHER CONTROLS	DESCR:		
J.HER JOHNSEO	MENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

LOCATION: FT. RILEY, KS

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS

AIR II	ANDLING UNIT 3	OKVET ODSEKVATI	0140
BUILDING NUMBE AHU NUMBE		AHU LOCATION: MER	
REFRIG SYS # SRVNG A		SERVES AREA: OFFICES - W	
	% OF BL	DG AREA HEATED:	2.5
AHU UNIT TYPE SING	LE ZONE	NUMBER OF ZON	IES IF MZ UNIT: 0
CFM-HTG:	1,200	CFM-CLG:	1,200
MIN %OA:	·	MAX %OA:	100
NAMEPLATE			100
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:		RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:	GAS FIRED: 27,000 BTUH IN	NPUT; 21,600 BTUH OUTPUT	
COILS	· · · · · · · · · · · · · · · · · · ·		
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:			
REHEAT COIL:	F		
HUMIDIFIER:		— H	
COOLING COIL:			
SCHEDULE		-	
SCHEDULE			
DAY SCHEDULE NO:	55	MONTH SCH	EDULE NO: 3
SCHEDULE COMMENTS:			*
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	3
REQ START: 0	9 7 9	<u> </u>	
REQ STOP: 0	<u>17</u> <u>17</u> <u>17</u>	15 17 0	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN	N: JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			
TYPE OF CON	TROLS: ELECTRIC	THERMOSTAT TYPE:	SINGLE SETPOINT
PRESENT TEMP WINT	R OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR		COLD DECK DEG F:	0
I IZCOURT TEINE ANIMIK	JNOCC: 0	MIXED AIR DEG F:	0
PRESENT TEMP SU	M OCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM L	JNOCC: 0	OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTRO	L: N MIXED AIR DMF	PR CONTROL: IN I IMPLEMENT	DEMAND LIMIT CNTRLS? IN
MIN OA DMPR CONTRO MAX OA DMPR CONTRO		<u></u>	
	L: Y ECONOMIZER D	DB CONTROL: N	TIME CLOCK: N
MAX OA DMPR CONTRO	L: Y ECONOMIZER DE L: Y ECONOMIZER W	DB CONTROL: N	
MAX OA DMPR CONTRO RET AIR DMPR CONTRO	L: Y ECONOMIZER DE L: Y ECONOMIZER W	DB CONTROL: N	TIME CLOCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

Ant in tibelity of the	TOTAL OBOLICATIONS
BUILDING NUMBER: 7920 AHU NUMBER: AHU-4	AHU LOCATION: MER
REFRIG SYS # SRVNG AHU: ACCU-4	SERVES AREA: OFFICES - WING D
% OF BL	DG AREA HEATED: 2.5
AHU UNIT TYPE SINGLE ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG : 1,200	CFM-CLG: 1,200
MIN %OA: 10	MAX %OA: 100
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP: 2	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS: GAS - FIRED; 27,000 BTUH	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	— п
HEATING COIL: NONE	—— T
REHEAT COIL: NONE	——
HUMIDIFIER: NONE	— <u> </u>
COOLING COIL: DX	T
COULING GOIL.	_
SCHEDULE	
DAY SCHEDULE NO: 55	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED:	THUR: FRI: SAT:
	0 0 0
	24 24 24
	7 9 0
REQ START: 0 9 7 9 17 17 17	15 17 0
REQ STOP: 0 17 17 17	13 17 0
MONTHS JAN: FEB: MAR: APR: MAY: JU!	N: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖂 🖂 🖂 🖂	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC: 0	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC: 0	COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC: 0	
PRESENT TEMP SUM UNOCC: 0	
MIN OA DMPR CONTROL: N MIXED AIR DMI	PR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: Y ECONOMIZER I	
RET AIR DMPR CONTROL: Y ECONOMIZER V	
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	
CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/17/94

LOCATION: FT	r. RILEY, KS ANDLING (JNIT SUR	RVEY OB	PREPARED BY		AMS
BUILDING NUMBER						
AHU NUMBER	: AHU-5		AHU LOCATION	N: MER		N WITH B APPLICATION
REFRIG SYS # SRVNG AH	IU: ACCU-5		ERVES AREA: REA HEATED:	OFFICES - WI	NG E	2.5
AHU UNIT TYPE SINGLI	E ZONE		N	JMBER OF ZON	ES IF MZ U	NIT: 0
CFM-HTG: MIN %OA:	1,2	200	CFM-CLG: MAX %OA:		1,200	
NAMEPLATE						
UNIT MFG:				IT MODEL:		CARROLANDO ANA MARIA
SUPPLY FAN HP: SUPPLY FAN MTR MFG:		2		H FAN HP:		0
SUPPLY FAN MTR MODEL:			RET/EXH FAN T/EXH FAN MT			
	GAS FIRED; 27,0					All the second s
COILS						
Coil	Coil Type		Modulating	Valve?		
PREHEAT COIL:			- n			
HEATING COIL:			- 🗒			
REHEAT COIL:	NONE					
HUMIDIFIER:	NONE					
COOLING COIL:	DX		_: L J			
SCHEDULE						
DAY SCHEDULE NO: SCHEDULE COMMENTS:	55			MONTH SCH	EDULE NO:	3
SUN:	MON: TUE:	WED: THUR	R: FRI:	SAT:		
PRES START: 0	0 0		00	0		e e
PRES STOP: 24 REQ START: 0	24 24	24 2		24		
REQ STOP: 0	$\frac{9}{17} = \frac{7}{17}$		$\frac{7}{5} = \frac{9}{17} =$	<u>0</u> 0		:
MONTHS JAN: FEB: NON:	MAR: APR: M	AY: JUN:	JUL: AUG:	SEP: OCT:	NOV:	DEC:
					\boxtimes	\square
CONTROLS						
TYPE OF CONTE	ROLS: ELECTRIC		_ '	IOSTAT TYPE:	SINGLE S	ETPOINT
PRESENT TEMP WINTR	occ:	0		DECK DEG F:		0
PRESENT TEMP WINTR UN	10CC:	0		DECK DEG F: ED AIR DEG F:		0
PRESENT TEMP SUM	occ:	0	OTHER SETPO			
PRESENT TEMP SUM UN		0		POINT DEG F:		0
MIN OA DMPR CONTROL:	N MIXE	DAIR DMPR CO	NTROL: N	IMPLEMENT	DEMANDII	MIT CNTRLS?
MAX OA DMPR CONTROL:		OMIZER DB CC		manifilmid		TIME CLOCK:
RET AIR DMPR CONTROL:	ECON	OMIZER WB CC	NTROL: N	TIME		PERATIONAL?

EXH AIR DMPR CONTROL: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE**: 10/17/94

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

	BUILDING NUMBER				=	A1111.1.7	DC A TION	MED.			,	
	AHU NUMBER	R: AHU-	6		_		OCATION					
	REFRIG SYS # SRVNG A	HU: ACC	CU-6	9/ OE	. DI DG	SERVES AREA H		OFFIC	ES - WIN	IG A	2.5	:
				% UF	BLUG	AKEA N	EATED:				2.5	
	AHU UNIT TYPE SINGL	E ZONE					N	JMBER (OF ZONE	S IF MZ	UNIT:	0
•	CFM-HTG:		1	,200		CF	M-CLG:			1,200		
	MIN %OA:			10		MA	X %OA:			100		
N	IAMEPLATE											
	UNIT MFG:						UN	IT MODE	L:			
	SUPPLY FAN HP:			2			RET/EX	H FAN H	IP:		0	
	SUPPLY FAN MTR MFG:					RET/E	XH FAN	MTR MF	G:	· · · · · · · · · · · · · · · · · · ·		
	SUPPLY FAN MTR MODEL:					RET/EXH			L:			
	COMMENTS:	GAS FII	RED; 27,0	000 BTU	H INPL	JT; 21,600	BTUH (DUIPUI				
2	OILS											
	Coil	C	Coil Type			Mo	dulating	Valve?				
	PREHEAT COIL:	NONE										
	HEATING COIL:	NONE										
	REHEAT COIL:	NONE										
	HUMIDIFIER:	NONE										
	COOLING COIL:	DX				Ц						
S	CHEDULE											
	DAY SCHEDULE NO:	55						MONT	TH SCHE	DULE NO):	3
	SCHEDULE COMMENTS:											
	SUN:	MON:	TUE:	WED	: TH	JR:	FRI:	SAT:				 -
	PRES START: 0	0	0		2		0	0				
	PRES STOP: 24	24	24	2	= =====	24		24				
	REQ START: 0	9	7		9 ===	7	$\frac{9}{47} =$	0				
	REQ STOP: 0	17	17	1	<u>/</u>	15		0				
ř	MONTHS JAN: FEB:	MAR:	APR: I	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
	ON:	\boxtimes	\boxtimes	\boxtimes		\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	1
0	ONTROLS											
	TYPE OF CONT	ROLS:	ELECTR	IC		_	THERM	MOSTAT	TYPE:	SINGLE	SETPOII	NT
	PRESENT TEMP WINTE	s occ.			0		HOT	DECK I	DEG F:			0
	PRESENT TEMP WINTR U				0			DECK [ED AIR [0
	PRESENT TEMP SU	M OCC:	Ē		0	OTHE		DINT DES				Ě
	PRESENT TEMP SUM U				0.	_		POINT D				0
	MIN OA DMPR CONTROL	.: N	MIX	ED AIR	DMPR	CONTRO	L: N	IMPLE	EMENT (DEMAND	LIMIT CI	NTRLS? N
	MAX OA DMPR CONTROL	_: <u>Y</u>	ECC	NOMIZ	ER DB	CONTRO	L: N				TIME	CLOCK: N
	RET AIR DMPR CONTROL	_: <u>Y</u>	ECO	NOMIZE	R WB	CONTRO	L: N		TIME	CLOCK (OPERAT	IONAL?
	EXH AIR DMPR CONTROL	.: N										
	OTHER CONTROLS	ESCR:										
	CONTROLS COM											

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

AINTIANDL	INO ONLI CONVET ODOLIVATIONO	
BUILDING NUMBER: 7920		_
AHU NUMBER: AHU-	AHU LOCATION: MER	-
REFRIG SYS # SRVNG AHU: ACC	CU-7 SERVES AREA: OFFICES - CENTRAL	
	% OF BLDG AREA HEATED: 2.5	
AHU UNIT TYPE SINGLE ZONE	NUMBER OF ZONES IF MZ UNIT:	0
CFM-HTG:	3,700 CFM-CLG : 3,700	
MIN %OA:	10 MAX %OA: 100	
NAMEPLATE		
UNIT MFG:	UNIT MODEL:	
SUPPLY FAN HP:	2 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:	
COMMENTS:		
COILS		
Coil	Coil Type Modulating Valve?	
PREHEAT COIL: NONE	: []	
HEATING COIL: NONE		
REHEAT COIL: NONE	: 🗖	
HUMIDIFIER: NONE		
COOLING COIL: DX		
SCHEDULE		
DAY SCHEDULE NO: 55	MONTH SCHEDULE NO:	3
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0		
PRES STOP: 24 24	<u>24</u> <u>24</u> <u>24</u> <u>24</u> <u>24</u>	
REQ START: 0 9	7 9 7 9	
REQ STOP:017	<u>17</u> <u>17</u> <u>15</u> <u>17</u> <u>0</u>	
	APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
ON: 🛛 🖾 🖾		:
CONTROLS		
TYPE OF CONTROLS:	ELECTRIC THERMOSTAT TYPE: SINGLE SETPOIN	1
PRESENT TEMP WINTR OCC:	0)
PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F:	<u>)</u>
	MIXED AIR DEG F:	<u>)</u>
PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F:	i ≡)
		-
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CN	
MAX OA DMPR CONTROL:	ECONOMIZER DB CONTROL: N TIME C	
RET AIR DMPR CONTROL: Y	ECONOMIZER WB CONTROL: N TIME CLOCK OPERATION)NAL?
EXH AIR DMPR CONTROL: N		
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING NUMBER		AUUL OCATION. M	-n
AHU NUMBER	R: <u>HV-1</u>	AHU LOCATION: MI	=K
REFRIG SYS # SRVNG A	IU: NONE	SERVES AREA: SUP	
	% OF BL	DG AREA HEATED:	2.5
AHU UNIT TYPE HEATI	NG AND VENTILATING	NUMBE	R OF ZONES IF MZ UNIT: 0
CFM-HTG:	5,000	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MO	DEL:
SUPPLY FAN HP:	3	RET/EXH FAI	MHP: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR	MFG:
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MO	DEL:
COMMENTS:	GAS FIRED; 439,000 BTUH	INPUT; 352,000 BTUH OUT	PUT
COILS			
Coil	Coil Type	Modulating Valve	?
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE	····		
DAY SCHEDULE NO:	55	MC	NTH SCHEDULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START:0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	9 7 9	7 9 0	
REQ STOP: 0	17 17 17	15 17 0	
MONTHS JAN: FEB:	MAR: APR: MAY: JU	N: JUL: AUG: SEF	C: OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	rols: ELECTRIC	THERMOST	AT TYPE: SINGLE SETPOINT
MMCACLIT TOLLN LLOST	R OCC: 0	HOT DEC	K DEG F: 0
PRESENT TEMP WINTI		COLD DEC	
PRESENT TEMP WINTR U	INOCC: 0	MIXED A	R DEG F: 0
PRESENT TEMP SUI	M OCC: 0	OTHER SETPOINT I	DESCRIP:
PRESENT TEMP SUM U	INOCC: 0	OTHER SETPOIN	T DEG F: 0
MIN OA DMPR CONTROL	L: N MIXED AIR DM	PR CONTROL: N IMP	PLEMENT DEMAND LIMIT CHTRLS?
MAX OA DMPR CONTROL			TIME CLOCK:
RET AIR DMPR CONTROL			TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL		ND CONTROL. [N]	THE SECON OF EXAMINATE
OTHER CONTROLS I			
CONTROLS COM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

AHU NUMBER	R: 7920 R: HV-2	AHU LOCATION: MER	
REFRIG SYS # SRVNG A		SERVES AREA: SUPPLY - WING B	
	% OF B	BLDG AREA HEATED:	2.5
AHU UNIT TYPE HEAT	ING AND VENTILATING	NUMBER OF ZONES IF MZ UNIT	T: 0
CFM-HTG:	5,000	CFM-CLG: 0	
MIN %OA:	100	MAX %OA:100	
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP: SUPPLY FAN MTR MFG:	3	RET/EXH FAN HP: RET/EXH FAN MTR MFG:	0
SUPPLY FAN MTR MODEL:	E. S. 441 Sec. 1911 4	RET/EXH FAN MTR MODEL:	THE STATE OF THE S
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:			
HEATING COIL: REHEAT COIL:			
HUMIDIFIER:		—— H	
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	55	MONTH SCHEDULE NO:	3
DAY SCHEDULE NO: SCHEDULE COMMENTS:	55	MONTH SCHEDULE NO:	3
SCHEDULE COMMENTS: SUN:	MON: TUE: WED:	THUR: FRI: SAT:	3
SCHEDULE COMMENTS: SUN: PRES START: 0	MON: TUE: WED: 0 0 0	THUR: FRI: SAT: 0 0 0	3
SCHEDULE COMMENTS: SUN:	MON: TUE: WED:	THUR: FRI: SAT:	3
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE: WED: 0 0 0 24 24 24	THUR: FRI: SAT: 0 0 0 24 24 24	3
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB:	MON: TUE: WED: 0 0 0 24 24 24 9 7 9 17 17 17	THUR: FRI: SAT: 0 0 0 24 24 24 7 9 0	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON: TUE: WED: 0 0 0 24 24 24 9 7 9 17 17 17	THUR: FRI: SAT: 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MON: TUE: WED: 0 0 0 24 24 24 9 7 9 17 17 17 MAR: APR: MAY: JU	THUR: FRI: SAT: 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PRES STOP: PREQ STOP: O MONTHS ON: SON: SON: SON: SON: SON: SON: SON	MON: TUE: WED: 0 0 0 24 24 24 9 7 9 17 17 17 MAR: APR: MAY: JU	THUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:]
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PRES STOP: PREQ STOP: O MONTHS ON: SON: SON: SON: SON: SON: SON: SON	MON: TUE: WED: 0 0 0 0 24 24 24 9 7 9 17 17 MAR: APR: MAY: JU □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	THUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE \[\times \	C:] POINT 0
SCHEDULE COMMENTS: PRES START: PRES STOP: REQ START: REQ STOP: O MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT	MON: TUE: WED: 0 0 0 0 24 24 24 9 7 9 17 17 17 MAR: APR: MAY: JUE: WED: ROLS: ELECTRIC ROCC: 0	THUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:]
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MON: TUE: WED: 0 0 0 0 24 24 24 9 7 9 17 17 17 MAR: APR: MAY: JUE ROLS: ELECTRIC ROCC: 0 MOCC: 0	THUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:] POINT 0 0
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTR U	MON: TUE: WED: 0 0 0 0 24 24 24 9 7 9 17 17 17 MAR: APR: MAY: JUE ROLS: ELECTRIC ROCC: 0 MOCC: 0	THUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:] POINT 0 0
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM U MIN OA DMPR CONTROL	MON: TUE: WED: 0 0 0 0 24 24 24 9 7 9 17 17 17 MAR: APR: MAY: JUE: CROCC: COE NOCC: COE MOCC: COE MIOCC: COE MIXED AIR DM	THUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:] POINT 0 0 0 0 T CNTRLS? N
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MON: TUE: WED: 0 0 0 0 24 24 24 9 7 9 17 17 17 MAR: APR: MAY: JUE: ROLS: ELECTRIC ROCC: 0 NOCC: THUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:] POINT 0 0 0 0 r cntrls? N ME clock: N	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM U MIN OA DMPR CONTROL	MON: TUE: WED: 0 0 0 0 24 24 24 9 7 9 17 17 17 MAR: APR: MAY: JUE: ROLS: ELECTRIC ROCC: 0 NOCC: 0 NOCC: 0 NOCC: 0 I N MIXED AIR DN ECONOMIZER I N ECONOMIZER ECONOMIZER	THUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0 JN: JUL: AUG: SEP: OCT: NOV: DE	C:] POINT 0 0 0 0 r cntrls? N ME clock: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

	• • • • • • • • • • • • • • • • • • • •										
BUILDING NUM											
AHU NUM	BER: HV-	3		•	AHU L	CATIO	N: MER				
REFRIG SYS # SRVN	AHU: NO	ONE		S	ERVES	AREA:	SUPPL	Y - WIN	G C		
			% OF	BLDG A	REA H	EATED:				2.5	
AHU UNIT TYPE HE	ATING AND	O VENTIL/	ATING			N	UMBER (OF ZON	ES IF MZ	UNIT:	0
CFM-H		5	5,000		CF	M-CLG:			0	·	
MIN %C			100		MA	X %OA:	;		100		
NAMEPLATE	***************************************										
UNIT M	G:					UN	IT MODE	EL:			
SUPPLY FAN I	IP:		3	-		RET/EX	H FAN F	IP:		0	
SUPPLY FAN MTR MI	·G:				RET/E	XH FAN	MTR MF	G:			
SUPPLY FAN MTR MOD	EL:			RE	ET/EXH	FAN MT	TR MODE	EL:			
COMMEN	Γ S : GAS F	IRED; 39	5,000 BTU	IH INPU	T; 316,	000 BTU	H OUTPL	JT			
COILS									-		
Coil		Coil Type)		Мо	dulating	Valve?				
PREHEAT CO	IL: NONE										
HEATING CO					- <u>-</u>						
REHEAT CO											
HUMIDIFI					$\overline{}$						
COOLING CO											
SCHEDULE					_						
DAY SCHEDULE NO): 55						MON	LII SCHI	EDULE NO	<u> </u>	3
SCHEDULE COMMENTS							HON	111 30111	LDOLL IN	J	
SUN		TUE:	WED:	THUF		FRI:	SAT:				
	$\frac{0}{4} = \frac{0}{24}$	0	0		0		0				
PRES STOP: 2		<u>24</u>	24		24 7	9	<u>24</u> 0				:
-	$\begin{array}{c} 0 \\ \hline 0 \\ \hline \end{array} \qquad \begin{array}{c} 9 \\ \hline 17 \\ \end{array}$	17	17		<u>′</u> ==	17					
REQ STOP:	<u> </u>		17	·	3	17					
MONTHS JAN: FEB	MAR:	APR:	MAY: .	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	\boxtimes	\boxtimes		\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	1
CONTROLS											
TYPE OF C	ONTROLS:	ELECTR	RIC				MOSTAT		SINGLE	SETPOIN	
PRESENT TEMP W	NTR OCC:			0			DECK				0
PRESENT TEMP WINT	R UNOCC:			0		-	DECK I				0
DDECENT TEMP	SHM OCC-			0	OTHE		ED AIR (DINT DES		-		0
PRESENT TEMP PRESENT TEMP SU				0			POINT DE				0
MIN OA DMPR CONT	ROL: N	MIY	ED AIR D	MPR CO	ONTRO	L: N	IMPLE	MENT	DEMAND	LIMIT CE	ITRI S?
MAX OA DMPR CONT			ONOMIZE				*****				CLOCK:
RET AIR DMPR CONT			NOMIZE					TIME	CLOCK		
EXH AIR DMPR CONT		ECC		VAD C	JNIKU	, L. [1 <u>1</u>		1 1341 E	JLUCK (OF LICA II	UNALI
EAR AIR DIVIER CONT	VOL. [N										
OTHER CONTROL											
CONTROLS CO	MMENTS:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/17/94

LOCATION: FT. RILEY, KS PREPARED BY: JM/AJN/AMS

BUILDING NUMBER AHU NUMBER	And a second sec	AHU LOCATION: MEZZANINE	
REFRIG SYS # SRVNG AF	IU: NONE	SERVES AREA: SUPPLY - WING	D
	% OF BLD	OG AREA HEATED:	2.5
AHU UNIT TYPE HEATI	NG AND VENTILATING	NUMBER OF ZONES	S IF MZ UNIT: 0
CFM-HTG:	5,000	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	-
SUPPLY FAN HP:	2	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	man of the second decimal and the second decimal and the second decimal and the second	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	Anderstanding of the property is a property in the property of	RET/EXH FAN MTR MODEL:	AM // I
COMMENTS:	GAS FIRED; 395,000 BTUH I	NPUT; 316,000 BTUH OUTPUT	And A and A second of the A second of the Assessment Company
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	55	MONTH SCHE	OULE NO: 1
SCHEDULE COMMENTS:			:
SUN:	MON: TUE: WED: 1	THUR: FRI: SAT:	:
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	1
REQ START: 0	9 7 9	7 9 0	
REQ STOP: 0	171717	15 17 0	:
MONTHS JAN: FEB: ON:	MAR: APR: MAY: JUN	: JUL: AUG: SEP: OCT:	NOV: DEC:
ON. 🛛 🗎			
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC		SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR U		COLD DECK DEG F:	0
ADPARLIT TELLS ALL	1000	MIXED AIR DEG F:	0
PRESENT TEMP SUM U		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	.: N MIXED AIR DMP	PR CONTROL: N IMPLEMENT DE	MAND LIMIT CNTRLS?
MAX OA DMPR CONTROL			TIME CLOCK:
RET AIR DMPR CONTROL			LOCK OPERATIONAL?
EXH AIR DMPR CONTROL		DOMINOL. [11]	LOSK OF LIMITORAL!
OTHER CONTROLS D			
CONTROLS COMM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

DATE: 10/17/94

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

	BUILDING NUMBEI				AHU LOC	ATION	I: MER				
	REFRIG SYS # SRVNG A	HU: NON	 E	1	SERVES A	REA:	SUPPLY	Y - WING	3 E		
				OF BLDG	AREA HEA	ATED:				2.5	
	AHU UNIT TYPE HEAT	ING AND V	ENTILATING	3		NU	IMBER O	F ZONE	S IF MZ	UNIT:	0
•	CFM-HTG:		5,000	-	CFM	-CLG:			0		
	MIN %OA:		100	. -	MAX	%OA:			100		
١	IAMEPLATE										
_	UNIT MFG:					UNI	T MODE	L: :			
	SUPPLY FAN HP:		2		R	ET/EXI	H FAN HI	P:		0	
	SUPPLY FAN MTR MFG:						MTR MF				
	SUPPLY FAN MTR MODEL: COMMENTS:		The state of the s		RET/EXH F	AN MT	R MODE	L:			
C	OILS										*
	Coil	Cc	oil Type		Modu	lating	Valve?				
	PREHEAT COIL:	NONE									
	HEATING COIL:	NONE									
	REHEAT COIL:	NONE			📙						
	HUMIDIFIER:				_						
	COOLING COIL:	NONE									
S	CHEDULE										
	DAY SCHEDULE NO:	55					MONT	H SCHE	DULE NO	D:	1
	SCHEDULE COMMENTS:										
	SUN:	MON:			UR: FF		SAT:				
	PRES START: 0	0	0	0 	0	0 24	<u>0</u> 				
	PRES STOP: 24 REQ START: 0	9	24 = 	9	7	9	0				*
	REQ STOP: 0	=== <u>=</u> =	17 =	17		<u> </u>	0				
	MONTHS JAN: FEB: ON:	MAR: A	PR: MAY	: JUN:	JUL: A	AUG:	SEP:	OCT:	NOV:	DEC:	•
_	ON. ⊠ ⊠							\boxtimes			
C	ONTROLS										
	TYPE OF CON	TROLS: E	LECTRIC				OSTAT		SINGLE	SETPOIN	
	PRESENT TEMP WINT	R OCC:		0			DECK D				0
	PRESENT TEMP WINTR I	JNOCC:		0			ED AIR D				0
	PRESENT TEMP SU	м осс:		0	OTHER	SETPO	INT DES	CRIP:			
	PRESENT TEMP SUM (JNOCC: [0	OTHE	R SET	POINT D	EG F:			0
	MIN OA DMPR CONTRO	L: N	MIXED A	NR DMPR	CONTROL	N	IMPLE	MENT D	DEMAND	LIMIT CN	ITRLS?
	MAX OA DMPR CONTRO	L: Y	ECONO	MIZER DB	CONTROL	: N				TIME C	CLOCK: [
	RET AIR DMPR CONTRO	L: N	ECONON	IIZER WB	CONTROL	: N		TIME	CLOCK	DPERATI	ONAL?
	EXH AIR DMPR CONTRO	L: N									
	OTHER CONTROLS	DESCR:									
	CONTROLS COM	MENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING NUMBEF AHU NUMBEF		AHU LOCATION: BAY	
			· · · · · · · · · · · · · · · · · · ·
REFRIG SYS # SRVNG AI	***************************************	SERVES AREA: WING A) F
	% OF BL	.DG AREA HEATED:	2.5
AHU UNIT TYPE MAKE	-UP AIR UNIT	NUMBER OF ZON	ES IF MZ UNIT: 0
CFM-HTG:	20,250	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	:
SUPPLY FAN HP:	7.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	A STATE OF THE PARTY OF THE PAR
COMMENTS:	GAS FIRED; 1,541,000 BTU	H INPUT	AND AND AND ADDRESS OF THE PARTY OF THE PART
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	55	MONTH SCH	EDULE NO: 1
SCHEDULE COMMENTS:			1
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	9 7 9	7 9 0	
REQ STOP: 0	17 17 17	15 17 0	
	MAR: APR: MAY: JUI	N: JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS	<u> </u>		الشنا السا
TYPE OF CONT	TROLS: ELECTRIC	THERMOSTAT TYPE:	SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR U		COLD DECK DEG F:	0
		MIXED AIR DEG F:	0
PRESENT TEMP SUM U		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	L: N MIXED AIR DMI	PR CONTROL: N IMPLEMENT	DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL	_		TIME CLOCK:
RET AIR DMPR CONTROL			CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL		TO SOUTHOL.	. SECON OF ENATIONAL!
OTHER CONTROLS D			
CONTROLS COMM	MENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS

	BUILDING NUMBER AHU NUMBER		AHU LOCATION	: BAY		
	REFRIG SYS # SRVNG AF	IU: NONE	SERVES AREA:	WING B		
		% OF	BLDG AREA HEATED:		2.5	
	AHU UNIT TYPE MAKE	-UP AIR UNIT	NU	MBER OF ZON	ES IF MZ UNIT:	0
	CFM-HTG:	19,625	CFM-CLG:		0	
	MIN %OA:	100	MAX %OA:	<u> </u>	100	
١	IAMEPLATE					
	UNIT MFG:			T MODEL:		
	SUPPLY FAN HP:	10		I FAN HP:	0	
	SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL:	RELIANCE	RET/EXH FAN I RET/EXH FAN MTI			
		GAS FIRED; 1,493,000 BT			A STATE OF THE PARTY OF THE PAR	
C	COILS					
	Coil	Coil Type	Modulating \	Valve?		
	PREHEAT COIL:	NONE				
		NONE				
	REHEAT COIL: HUMIDIFIER:	NONE	 			
	COOLING COIL:		—— <u> </u>			
9	CHEDULE					
_	DAY SCHEDULE NO:	55		MONTH SCH	EDITE NO:	1
	SCHEDULE COMMENTS:			MICITITY SCIT	LDOLL NO.	<u>-</u> -
	SUN:	MON: TUE: WED:	THUR: FRI:	SAT:		_
	PRES START: 0	0 0 0	0 0	0		1
	PRES STOP: 24 REQ START: 0	$\frac{24}{9} = \frac{24}{7} = \frac{24}{9}$	24 24 9	<u>24</u> 0		
	REQ START: 0 REQ STOP: 0	$\frac{9}{17} = \frac{7}{17} = \frac{9}{17}$		<u></u>		
ı	MONTHS JAN: FEB: ON:	MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT:	NOV: DEC:	1
	O(1. ⊠ ⊠					
C	CONTROLS					
	TYPE OF CONT	ROLS: ELECTRIC		OSTAT TYPE:	SINGLE SETPOINT	
	PRESENT TEMP WINTE	₹ OCC:	0	DECK DEG F:	0	=
	PRESENT TEMP WINTR U	NOCC:	0	D AIR DEG F:	0	=
	PRESENT TEMP SU	N OCC:	0 OTHER SETPO	INT DESCRIP:		
	PRESENT TEMP SUM U	NOCC:	OTHER SET	POINT DEG F:	0	<u> </u>
	MIN OA DMPR CONTROL	.: N MIXED AIR D	MPR CONTROL: N	IMPLEMENT	DEMAND LIMIT CNT	RLS? N
	MAX OA DMPR CONTROL		R DB CONTROL: N		TIME CL	<u></u>
	RET AIR DMPR CONTROL EXH AIR DMPR CONTROL	==	R WB CONTROL: N	TIME	CLOCK OPERATIO	NAL? N
	OTHER CONTROLS D					in the second se
	COM L KOT2 COM	ILITIO.				į.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS

BUILDING NUMBER			
AHU NUMBER	R: MAU-3	AHU LOCATION: BAY	
REFRIG SYS # SRVNG AF	HU: NONE	SERVES AREA: WING C	
	% OF BLD	G AREA HEATED:	2.5
AHU UNIT TYPE MAKE	-UP AIR UNIT	NUMBER OF ZONES IF MZ	UNIT: 0
CFM-HTG:	20,900	CFM-CLG: 0	
MIN %OA:	100	MAX %OA: 100	
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	7.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	
COMMENTS:	GAS FIRED; 1,590,000 BTUH		
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE	—· 🗖	
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	55	MONTH SCHEDULE N	O: <u>1</u>
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: TI	HUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	9 7 9	7 9 0	
REQ STOP: 0	<u> 17 17 17 17 </u>	15 17 0	
	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV:	DEC:
ON: ☑ ☑			\boxtimes
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE	SETPOINT
PRESENT TEMP WINTE	R OCC: 0	HOT DECK DEG F:	<u> </u>
PRESENT TEMP WINTR UI	<u> </u>	COLD DECK DEG F:	0
PRESENT TEMP SUN	M OCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM U		OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL	: N MIXED AIR DMPF	CONTROL: N IMPLEMENT DEMAND	LIMIT CNTRLS? N
MAX OA DMPR CONTROL			TIME CLOCK: N
RET AIR DMPR CONTROL			OPERATIONAL? N
EXH AIR DMPR CONTROL	=		
OTHER CONTROLS D	ESCR:		,

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS LOCATION: FT. RILEY, KS

EMC NO: 1406-001

AID HANDLING LINIT SLIDVEY ORSEDVATIONS

AIR H	ANDLING UNIT	SURVEY OBS	PERVAII	UNS	
BUILDING NUMBER	R: 7920				_
AHU NUMBER	R: MAU-4	AHU LOCATION	: BAY		-
REFRIG SYS # SRVNG AI	HU: NONE	SERVES AREA:	WING D		
	% OF	BLDG AREA HEATED:		2.5	
AHU UNIT TYPE MAKE	-UP AIR UNIT	NU	MBER OF ZON	ES IF MZ UNIT:	0
CFM-HTG:	20,900	CFM-CLG:		0	
MIN %OA:	100	MAX %OA:	,	100	
NAMEPLATE					
UNIT MFG:	:	UNI	T MODEL:		
SUPPLY FAN HP:	5	RET/EXI	H FAN HP:	0	
SUPPLY FAN MTR MFG:		RET/EXH FAN I			
SUPPLY FAN MTR MODEL:		RET/EXH FAN MT	R MODEL:		
COMMENTS:	GAS FIRED; 1,590,000 B	FUH INPUT			
COILS					
Coil	Coil Type	Modulating \	Valve?		
PREHEAT COIL:	NONE	. 🔲			
HEATING COIL:	NONE				
REHEAT COIL:	NONE	. 🔲			
HUMIDIFIER:	NONE				
COOLING COIL:	NONE				
SCHEDULE					
DAY SCHEDULE NO:	55		MONTH SCH	EDULE NO:	1
SCHEDULE COMMENTS:					
SUN:	MON: TUE: WED:	THUR: FRI:	SAT:		_
PRES START: 0	0 0 0	0 0	0		
PRES STOP: 24	24 24 24	24 24	24		
REQ START: 0	9 7 9	7 9	0		
REQ STOP: 0	17 17 17	15 17	0		
MONTHS JAN: FEB:	MAR: APR: MAY: .	JUN: JUL: AUG:	SEP: OCT:	NOV: DEC:	_
ON:				\boxtimes	
CONTROLS					
TYPE OF CONT	TROLS: ELECTRIC		OSTAT TYPE:	SINGLE SETPOIN	
PRESENT TEMP WINT	R OCC:	0	DECK DEG F:		0
PRESENT TEMP WINTR L	INOCC:	0.	DECK DEG F: ED AIR DEG F:		0 0
PRESENT TEMP SU	M OCC:	0 OTHER SETPO			=
PRESENT TEMP SUM L			POINT DEG F:		0
MIN OA DMPR CONTRO	L: N MIXED AIR D	MPR CONTROL: N	IMPLEMENT	DEMAND LIMIT CN	TRLS? N
MAX OA DMPR CONTRO		R DB CONTROL: N		TIME C	
RET AIR DMPR CONTRO		R WB CONTROL: N	TIME	CLOCK OPERATION	ONAL? N
EXH AIR DMPR CONTRO					
OTHER CONTROLS	DESCR:				
CONTROLS COM	MENTS:				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/17/94 PREPARED BY: JM/AJN/AMS

AIIX III	ANDEING ONLY	UNVETUDSENVATIONS	
BUILDING NUMBER AHU NUMBER		AHU LOCATION: BAY	
ANU NUMBER	. IVIAU-5	AND LOCATION: BAT	
REFRIG SYS # SRVNG AH		SERVES AREA: WING E	
	% OF BLE	OG AREA HEATED: 2.5	
AHU UNIT TYPE MAKE-	UP AIR UNIT	NUMBER OF ZONES IF MZ UNIT: 0	
CFM-HTG:	20,900	CFM-CLG: 0	
MIN %OA:	100	MAX %OA: 100	
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	5	RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG:	A A A SHARM AND A SHARM A SHARM AND A SHARM AND A SHARM AND A SHARM AND A SHARM AND A SHAR	RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	N. S. S. S. S. S. S. S. S. S. S. S. S. S.	RET/EXH FAN MTR MODEL:	
COMMENTS:	GAS FIRED; 1,590,000 BTUH	INPUT	
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	NONE		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	55	MONTH SCHEDULE NO: 1	
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: T	HUR: FRI: SAT:	
PRES START: 0	0 0 0	0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	9 7 9	7 9 0	
REQ STOP: 0	17 17 17	15 17 0	
MONTHS JAN: FEB: I	MAR: APR: MAY: JUN	: JUL: AUG: SEP: OCT: NOV: DEC:	
ON:			
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPOINT	-
DDECENT TEMP MAINTE	000	HOT DECK DEG F: 0	
PRESENT TEMP WINTR PRESENT TEMP WINTR UI		COLD DECK DEG F: 0	
		MIXED AIR DEG F: 0	
PRESENT TEMP SUM PRESENT TEMP SUM UN		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: 0	
MIN OA DMPR CONTROL	: N MIXED AIR DMP	R CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?	N
MAX OA DMPR CONTROL			N
RET AIR DMPR CONTROL			N
EXH AIR DMPR CONTROL		HIME GLOCK OPERATIONAL?	لنا
OTHER CONTROLS D	FSCR:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING NUMBER: 7920 AHU NUMBER: MAU-6 AHU LOCATION: BAY REFRIG SYS # SRVNG AHU: NONE SERVES AREA: CENTRAL % OF BLDG AREA HEATED: 2.	
REFRIG SYS # SRVNG AHU: NONE SERVES AREA: CENTRAL	
% OF BLDG AREA HEATED: 2.	_
	5
AHU UNIT TYPE MAKE-UP AIR UNIT NUMBER OF ZONES IF MZ UNIT:	0
CFM-HTG: 14,500 CFM-CLG: 0	
MIN %OA: 100 MAX %OA: 100	
NAMEPLATE	
UNIT MFG: UNIT MODEL: 5	···
SUPPLY FAN HP: 0 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG: RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
COMMENTS: GAS FIRED; 1,101,000 BRHU INPUT	
COILS	
Coil Coil Type Modulating Valve?	·
PREHEAT COIL: NONE	
HEATING COIL: NONE	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	
SCHEDULE	
DAY SCHEDULE NO: 55 MONTH SCHEDULE NO:	1
SCHEDULE COMMENTS:	:
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0 0 0 0	
PRES STOP: 24 24 24 24 24 24 24 24	
REQ START: 0 9 7 9 0	
REQ STOP: 0 17 17 17 15 17 0	
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
	;
CONTROLS	
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPO	
PRESENT TEMP WINTR OCC: 0 HOT DECK DEG F:	0
FALSENT TENT WINTA COC.	0
PRESENT TEMP WINTR OCC: 0 COLD DECK DEG F: MIXED AIR DEG F:	 :
PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F:	0,
PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F:	
PRESENT TEMP WINTR UNOCC: O MIXED AIR DEG F: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: O OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	NTRLS?
PRESENT TEMP WINTR UNOCC: O MIXED AIR DEG F: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: O OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT OF	CLOCK:
PRESENT TEMP WINTR UNOCC: O MIXED AIR DEG F: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: O OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: MIN OA DMPR CONTROL: MIXED AIR DMPR CONTROL: MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT OF TIME	CLOCK:
PRESENT TEMP WINTR UNOCC: O MIXED AIR DEG F: PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: O OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: MIN OA DMPR CONTROL: MIXED AIR DMPR CONTROL: MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT OF TIME	CLOCK:
PRESENT TEMP WINTR UNOCC: D MIXED AIR DEG F: PRESENT TEMP SUM OCC: D OTHER SETPOINT DESCRIP: PRESENT TEMP SUM UNOCC: D OTHER SETPOINT DEG F: MIN OA DMPR CONTROL: M MIXED AIR DMPR CONTROL: N MIXED AIR DMPR CONTROL: N MIXED AIR DMPR CONTROL: N MIXED AIR DMPR CONTROL: N TIME ECONOMIZER DB CONTROL: N TIME CLOCK OPERA	CLOCK:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

EMC NO: 1406-001

BUILDING NUMBER: AHU NUMBER:	7920 UH-1	AHU LOCATION: CEILING	MOUNTED
REFRIG SYS # SRVNG AHU		SERVES AREA: CENTRAL G AREA HEATED:	18
AHU UNIT TYPE GAS-FIR	ED UNIT HEATER	NUMBER OF Z	ONES IF MZ UNIT: 0
CFM-HTG: MIN %OA:	20,240	CFM-CLG:	0
NAMEPLATE			
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL:	5 TOT. FOR 11 UHS; BTUH INP	UNIT MODEL: RET/EXH FAN HP: RET/EXH FAN MTR MFG: RET/EXH FAN MTR MODEL: UT: 1,650,000; BTUH OUTPUT:	1,320,000
Coil	Coil Type	Modulating Valve?	
HEATING COIL: N REHEAT COIL: N HUMIDIFIER: N	NONE NONE NONE NONE		
DAY SCHEDULE NO: SCHEDULE COMMENTS:	55	MONTH S	CHEDULE NO: 1
PRES START: 0 PRES STOP: 24 REQ START: 0 REQ STOP: 0	MON: TUE: WED: THOU IN THE WED: THOU IN	HUR: FRI: SAT: 0 0 0 0 24 24 24 7 9 0 15 17 0	
MONTHS JAN: FEB: MA ON:	AR: APR: MAY: JUN:	JUL: AUG: SEP: OC	
CONTROLS			
TYPE OF CONTRO PRESENT TEMP WINTR O PRESENT TEMP WINTR UNO	OCC: 0	THERMOSTAT TYP HOT DECK DEG COLD DECK DEG	F: 0
PRESENT TEMP SUM OF PRESENT TEMP SUM UNC	DCC: 0	MIXED AIR DEG OTHER SETPOINT DESCRI OTHER SETPOINT DEG F	P:
MIN OA DMPR CONTROL: MAX OA DMPR CONTROL: RET AIR DMPR CONTROL: EXH AIR DMPR CONTROL:	N MIXED AIR DMPR N ECONOMIZER DB N ECONOMIZER WB	CONTROL: N	TIME CLOCK: N ME CLOCK OPERATIONAL?
OTHER CONTROLS DES			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: JM/AJN/AMS

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NUM	BER:	7920			BLDG NAME: VEH MNT SHOP DS									
PER RAD (ER RAD (SYSTEM TAG) NO: RA						RAD SY	S LOCA	TION:	BAYS				
		HEATIN		URAL C	3AS		S	ERVES A	AREA:	WINGS A, B, C, D, & E				
RADI	ATION L	JNIT TYP	E: NAT	URAL (3AS			% AREA	HTG:		3	8		
SCHED	ULE													
DAY	/S SCHI	EDULE N	o:	5	55	MON	NTHS SC	HEDULE	NO:		1			
SCHE	DULE C	OMMENT	s:											
		SUN:	MON:	TUI	E: W	ED: TH	UR:	FRI:	SAT:					
PRES ST	PRES START: 0 0			0	0	0	0	0						
PRES S	STOP:	24	24		24	24	24	24	24					
REQ ST	TART:	0	9		7	9	<u> </u>	9	0					
REQ S	STOP:	0	17		17	17	15	17	0					
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:		
ON:	\boxtimes	X	\boxtimes	\boxtimes						\boxtimes	\boxtimes	M		
CONTR	OLS													
TYI	PE OF R	AD. CON	ITROLS:	ELEC	TRIC									
	RADIA	TION CO	NTROL:											
	OCC HT SPACE SP: UNOCC HT SPACE SP:			0 RESET CONTROL: N										
	CONTROL COMMENTS:												_	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: JM/AJN/AMS

BLDG NUMBER: 7	920		_	BLI	DG NAME:	VEH	MNT SH	OP DS			
REF. UNIT NUMBER/T	AG: A	CCU-7					LOCA	TION (ME	:R#): F	ROOF	
							AH	U'S SER\	/ED: Ā	HU-7	
U	NIT TYP	PE AIF	R COOLE	D CON	IDENSING	UNIT,	DX				
NAMEPLATE											
CHILLER MF	G: TRA	ANE					TOWER	MFG:			
CHILLER MODE	L:					# OF 1	OWER F	ANS:			2
CHILLER SERIAL NO	O:					Т	OWER F	AN V:			230
CHILLER	V:			0		TOWE	R FAN A	MPS:			2.2
CHILLER AMP	s:			0		то	WER FA	N HP:			0.5
CHILLER PI	H:			0				_			
CHILLER CAP (TONS	S):			8							
COMMENT	s:										
SCHEDULE											
DAYS SCHEDU SCHEDULE COM			55			MO	NTHS SC	CHEDULE	NO:	2	
PRES START: PRES STOP: REQ START: REQ STOP:	UN: 0 24 0 0	MON: 0 24 9 17	TUE: 0 24 7 17		0 24 9	R: 0 24 7	FRI: 0 24 9 17	SAT: 0 24 0 0			:
MONTHS JAN: FE	EB: M	IAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
				\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes			
CONTROLS											
TYPE OF CO	NTROLS	: ELE	CTRIC								
CWS SI	ETPOIN	т: 🗀			0	CN	IWS SET	POINT:	:		0
CWR SE	ETPOIN	т: 🔚			0		WR SET				0
PRESS PRESS L PRESS (CONTROLS	GAUGES	V: N S: N	Ţ	EMP L	P LITE HI: ITE LOW: GAUGES:	N N N		IER INDI	CATIOR	S:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: JM/AJN/AMS

BLDG NUMBE	R: 7920			BLDG N	AME: VEH	MNT SH	OP DS			
REF. UNIT NUM	BER/TAG	: ACCU-6	5			LOCA	TION (ME	R#): R	OOF	
							U'S SER	VED: A	HU-6	
	UNIT	TYPE A	IR COOLED	CONDEN	ISING UNIT,	DX				
NAMEPLA	TE									
CHILLE	R MFG:	TRANE				TOWER	MFG:			
CHILLER	MODEL:	OAUA-25	2-B		=	TOWER I	=			1
CHILLER SER	IAL NO:	-				OWER F	=			230
CHI	LLER V:			0		ER FAN A	_			2.2
CHILLER	RAMPS:			0	TC	WER FA	N HP:			0.5
	LER PH:			0						
CHILLER CAP	(TONS):			4						
COM	MENTS:									
SCHEDUL	<u> </u>									
DAYS SO SCHEDULE	CHEDULE	7	55		MC	ONTHS S	CHEDUL	E NO:	2	
	SUN	: MON:	TUE:	WED:	THUR:	FRI:	SAT:			****
PRES START	:(0 0	0	0	0	0 =	0			
PRES STOP	: 24			24	24	24	24			
REQ START		9		9		9	0			
REQ STOP	:) 17	17	17	15	17	0			
MONTHS JAN	l: FEB:	MAR:	APR: N	MAY: JU	JN: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:						\boxtimes	\boxtimes			
CONTROL	.S									
TYPE	OF CONTE	KOLS: EI	ECTRIC							
C	WS SET	POINT:		0	С	NWS SE	TPOINT:			0
c	WR SET	POINT:		0	C	NWR SE	TPOINT:			0
PR	PRESS L RESS LITE RESS GA	LOW:	=	TEMP LI EMP LITE TEMP GAU	LOW: N	ОТ	HER IND	ICATIOR	S:	
				LIIII OA	, , , , , , , , , , , , , , , , , , ,					
CONI	KULS CC	MMENTS:								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: JM/AJN/AMS

BLDG NUMBER: 7920 BL	DG NAME: VEH MNT SHOP DS
REF. UNIT NUMBER/TAG: ACCU-5	LOCATION (MER#): ROOF
	AHU'S SERVED: AHU-5
UNIT TYPE AIR COOLED COI	NDENSING UNIT, DX
NAMEPLATE	
CHILLER MFG: TRANE	TOWER MFG:
CHILLER MODEL: OAUA-252-B	# OF TOWER FANS:
CHILLER SERIAL NO:	TOWER FAN V: 230
CHILLER V: 0	TOWER FAN AMPS: 2.2
CHILLER AMPS: 0	TOWER FAN HP: 0.5
CHILLER PH: 0	
CHILLER CAP (TONS): 4	
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 55	MONTHS SCHEDULE NO: 2
SCHEDULE COMMENTS:	
SUN: MON: TUE: WI	ED: THUR: FRI: SAT:
PRES START: 0 0 0	0 0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 9 7	9 7 9 0
REQ STOP: 0 17 17	17 15 17 0
MONTHS JAN: FEB: MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	
CWS SETPOINT:	0 CNWS SETPOINT: 0
CWR SETPOINT:	0 CNWS SETPOINT: 0 0 CNWR SETPOINT: 0
	O CHWA SETPOINT.
	IP LITE HI: N OTHER INDICATIONS:
	LITE LOW: N
PRESS GAUGES: N TEMP	GAUGES: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BLDG NUMBER: 7920	BLDG NAME:	VEH MNT SHOP DS	
REF. UNIT NUMBER/TAG: ACCU-2		LOCATION (MER#):	ROOF
		AHU'S SERVED:	AHU-2
UNIT TYPE AIR COOLE	D CONDENSING	UNIT, DX	
NAMEPLATE			
NAIVIEPLATE			
CHILLER MFG: TRANE		TOWER MFG:	
CHILLER MODEL: OAUA-252-B		# OF TOWER FANS:	1
CHILLER SERIAL NO:		TOWER FAN V:	230
CHILLER V:	0	TOWER FAN AMPS:	2.2
CHILLER AMPS:	0	TOWER FAN HP:	0.5
CHILLER PH:	0		
CHILLER CAP (TONS):	4		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE NO: 55 SCHEDULE COMMENTS:		MONTHS SCHEDULE NO:	2
	1 1 1 1 1 1 1		
SUN: MON: TUE			
PRES START: 0 0 0		$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	
PRES STOP: 24 24 24 24 REQ START: 0 9 7		$\frac{24}{7} = \frac{24}{9} = \frac{24}{0}$	
REQ START: 0 9 7 REQ STOP: 0 17 17		$\frac{7}{15} = \frac{9}{17} = \frac{0}{0}$	
REQ 510F. 0 17 17		10 . 17	
MONTHS JAN: FEB: MAR: APR:	MAY: JUN:	JUL: AUG: SEP: OC	T: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTROLS: ELECTRIC			
CWS SETPOINT:	0	CNWS SETPOINT:	0
CWR SETPOINT:	0	CNWR SETPOINT:	0
·		OTHER MINISTER	000
PRESS LITE HI: N	TEMP LITE HI:		ORS:
	TEMP LITE LOW:		
PRESS GAUGES: N	TEMP GAUGES:	N	
CONTROLS COMMENTS:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: JM/AJN/AMS

BLDG NUMBER:	7920		MATERY .	BL	DG NAME	: VEH	MNT SH	OP DS			
REF. UNIT NUMBER/	TAG:	ACCU-1					LOCA	TION (ME	R#): R	OOF	
								U'S SER\			
ŧ	T TINU	YPE AI	R COOLE	D CON	DENSIN	G UNIT,	DX				
NAMEPLATE											
CHILLER ME	G: T	RANE			* ************************************		TOWER	MFG:			
CHILLER MODI	EL: C	DAUA-252	-B	***************************************		# OF T	TOWER F	ANS:			2
CHILLER SERIAL N	10:					T	OWER F	AN V:			230
CHILLER	: V:			0		TOWE	R FAN A	MPS:		-	2.2
CHILLER AM	PS: _			0		тс	WER FA	N HP:			0.5
CHILLER F	PH: _			0							
CHILLER CAP (TON	S):			4							
COMMEN.	rs:										
SCHEDULE											
DAYS SCHED	ULE N	10:	55			MC	NTHS S	CHEDULE	E NO:	2	
SCHEDULE CON	MENT	rs:							****		
	SUN:	MON:	TUE:	WE	D· THI	JR:	FRI:	SAT:			
PRES START:	0	0	0		0			0			
PRES STOP:	24	24	24	: ===	24	24	24	24			
REQ START:	0	9	7	. ====	9	7	9	0			
REQ STOP:	0	17	17		17	15	17	0			4
	EB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:				\times	Σ	\boxtimes	\boxtimes	\boxtimes			
CONTROLS											
TYPE OF CO	ONTRO	DLS: EL	ECTRIC			- 					
cws s	SETPO	INT:			0	CI	NWS SET	POINT:	:		0
CWR S	SETPO	INT:			0	C	NWR SET	POINT:			0
PRES	S LIT	EHI: N	П	TEM	IP LITE H	ı: N	ОТ	HER INDI	CATIORS	s.	
PRESS			≓		LITE LOW		<u> </u>		0,,,,,	· · · · · · · · · · · · · · · · · · ·	
PRESS			=		GAUGES	=	L				·····.
CONTROLS	COM	MENTS:									t I

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94
PREPARED BY: JM/AJN/AMS

BLDG N	UMBER:	7920			BL	DG NAME	: VEH	MNT SH	OP DS				
REF. UNIT	NUMBE	R/TAG:	ACCU-	3				LOCA	TION (ME	: R #): R	OOF		
IXEI . OIIII				-					u'S SER\		HU-3	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	
		UNIT	TYPE A	IR COOL	ED CON	DENSING	G UNIT.						
							,						
NAMER	LAT	<u> </u>											
С	HILLER I	MFG:	CARRIER					TOWER	=				
CHIL	LER MO	DEL:	38FGA30	500				OWER F	===			1	
CHILLER	R SERIAL	_ NO:						OWER F	==			0	
	CHILLE	ER V:			0			R FAN A					
СН	ILLER A	MPS:			0		то	WER FA	N HP:			0.25	
	CHILLER				0								
CHILLER	CAP (TO	ONS):			_3								
	COMME	NTS:											
CHED	ULE												
DA	YS SCHE	DULE	NO:	55			MO	NTHS S	CHEDULI	E NO:	2		
	DULE CO												
		SUN:	MON:	TUE	· WF	D: THU	IR·	FRI:	SAT:				
PRES S	TART	0				0	0	0 -	0				
PRES		24			= ===	24	24	24	24				
REQ S	=	0				9	7	9	0				
	STOP:	0				17	15	17	0				
			-										
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
OI1.							\boxtimes						:
CONTR	OLS												
~	YPE OF	CONTR	OLS EI	ECTRIC			7						
1	TEL OF	CONTR	.VLU. EI	LOTRIO									
	CW	S SETP	OINT:			0		WS SET		<u> </u>		0	
	CWI	R SETP	OINT:			0	Ci	IWR SET	POINT:			0	
	PR	ESS LI	тені: П	v I	TEN	IP LITE H	I: N	ОТ	HER INDI	CATIOR	S:		
		SLITE		₹		LITE LOW	===					_	
		SS GAL	=	<u>v</u>		GAUGES							
	CONTRO	LS CO	MMENTS:										
		_		(

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: JM/AJN/AMS

BLDG NUMBER:	7920			BL	DG NAME:	VEH	MNT SH	OP DS				
REF. UNIT NUMBER	R/TAG:	ACCU-4	ļ				LOCAT	TION (MEI	R#): R	OOF		
				namenananan r				J'S SERV		HU-4		
	UNIT T	YPE A	R COOLE	D CON	IDENSING	UNIT, E	ΟX		**************************************			
NAMEPLATE												
CHILLER M	MFG: H	IEAT WA	VE				TOWER	MFG:				
CHILLER MOI	DEL:	CTD 904				# OF T	OWER F	ANS:			1	
CHILLER SERIAL	NO:					TO	OWER F	AN V: 📋			0	
CHILLE	R V:			0		TOWE	R FAN A	MPS:			0	
CHILLER AN	/IPS:		***************************************	0		TO	NER FAI	N HP:			0.5	
CHILLER	PH:			0								
CHILLER CAP (TO	NS):			4								
COMME	NTS:											
SCHEDULE												
DAYS SCHE	DULE N	10:	55			MOI	NTHS SC	HEDULE	NO:	2		
SCHEDULE CO								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				 .
	SUN:	MON:	TUE:	WE	D: THUF	R:	FRI:	SAT:				
PRES START:	0	0	. 0		0	0	0	0				
PRES STOP:	24	24	24			4	24	24				
REQ START:	0	9	7		9	7	9	0				
REQ STOP:	0	17	. 17		17 1	5		0				
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:				X	\boxtimes	\boxtimes						:
CONTROLS												
TYPE OF C	ONTRO	LS: EL	ECTRIC									
CWS	SETPO	NNT.			0	CN	WS SET	DOINT:	· · · · · · · ·			
	SETPO	=			0		WS SET		[0	
			_				TIN SEI	i Onti.	<u> </u>		U,	
	SS LITI		빌		P LITE HI:	N	OTH	IER INDIC	CATIORS	S:		
	LITE L	==	=		ITE LOW:	N						
PRES	S GAUC	BES: L	1]	TEMP	GAUGES:	N						
CONTROL	_S COM	MENTS:										:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

7920

FILE:

7920.XLS

	AIR I	HANDLIN	NG UNIT - HVAC L	JPGRADE (OBSERVAT	FIONS		
AHU NO.: DOOR HEATER	RS 1-8	LOCATIO	ON (Rm) CENTE	R AREA	1 1,11			
AHU TYPE:	SZ	MFG.:		•	MODEL:			
SZ - Single Zone		ating & Vntltr	•	n Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	pe)	
MZ - Mulitzone		iable Air Vol		Reheat System				
DD - Dual Duct	UH - Unit	Heater		duction System				
D.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
OMMENTS:			IN A RING WITH A BLO				DPR-ACT = Dampe	r Actuator
			IE DOORS ARE OPEN (N	IO EXHAUST).	2 UNITS		RP-ACT = Replace	Actuator
	NOT OPE	RATING.						
ILTER SECTION	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	ОК: Х	REPLAC	E FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLAC	E:	COMMEN	ITS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		E FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLAC		COMMEN		·		
COMMENTS:			***************************************	<u> </u>				
JOHN LIVIO.								
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	Actuator
	****		1.000				RP-BD = Replace B	ody
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:		·		
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		****		
COMMENTS:		1017.	T. C. O.C.	10:22-				
DUMINEM 19.								
PIPE INSULATION	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY:			
DUCT INSULATION	N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY:			
COMMENTS:								
								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

			D: D.C	7000				7.01
				7920		FILE:	7920.XLS	
		HANDLII	NG UNIT - HVAC			TIONS		
AHU NO.:	UH-1		ON (Rm) WEST	TWING, MEZZAN	VINE			
AHU TYPE: UNIT HEATEI		MFG.:			MODEL:			
SZ - Single Zone		ating & Vntlt		an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	pe)	
MZ - Mulitzone	·VAV - Var	iable Air Vol		Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND -	Induction System	l			
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	GAS FIRE	D W/EXHA	UST			-	DPR-ACT = Damp	er Actuator
				****			RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:				
COMMENTS:	ON TINU	T ACCESSIE	BLE					
SUPPLY AIR FAN	OK: X	REPLAC	CE FAN BEARINGS:	COMMEN	NTS:		 	
SUPPLY FAN MOTOR	OK: X	REPLAC		COMMEN				-
INLET VANES	N/A: X	OK:	COMMENTS:	1991111121				
RETURN AIR FAN	OK:		E FAN BEARINGS:	COMMEN	JTS:	N/A	······································	
RETURN FAN MOTOR	OK:	REPLAC		COMMEN		IN/A		
COMMENTS:		I C D C	/L.	TOOIVIIVIEI	110.			
OOMINETYTO.								
						-		
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
HEATING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
COMMENTS:	IN/A: X	JUN:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
COMMENTS:	·····			·			RP-ACT = Replace	
		·					RP-BD = Replace B	Body
				louze				
AHI I PI IMP MOTOR	N/A· ¥	IOV.	IDEDLACE:					
	N/A: X	OK:	REPLACE:	SIZE:			*****	
AHU PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS								
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X	ок:	REPLACE:	SIZE:	ED QUANTITY			
AHU PUMP SEALS				SIZE:	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

7920

FILE: 7920.XLS

Al	R HAND	LING U	NIT - HVA	AC UPGRA	ADE	OBSER	VATIO	NS	
AHU NO.:	UH-2	LOCATIO	N (Rm) C	ORE AREA (V	VARE	HOUSE)			
AHU TYPE:	SZ	MFG.:				MODEL:			
SZ - Single Zone	H&V - He	eating & Vr	ntltng. FO	C - Fan Coil (Indica	te 2P for 2	Pipe or 4	4P for 4 Pipe)	
MZ - Mulitzone	:VAV - Va	riable Air \	√ol. Rl	HT - Reheat S	Systen	n			
DD - Dual Duct	UH - Unit	Heater	IN	ID - Induction	Syste	em			
O.A. DAMPER	N/A:	OK:	REPLACE:	SIZE		DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK:	REPLACE:	SIZE	:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE	:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE		DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE	:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	GAS FIRE	D UNIT H	EATERS WITH	I FLUE.				DPR-ACT = Dar	nper Actuator
								RP-ACT = Repla	ace Actuator
FU TED CECTION	N/A:	Tok:	TREPLACE:	SIZE				<u> </u>	
FILTER SECTION	IN/A:	JUK:	INEPLACE.	13121					
COMMENTS:									
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARIN	GS: CON	имем	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE	•	CON	MEN	TS:			
INLET VANES	N/A: X	OK:	COMMENTS);					
RETURN AIR FAN	OK:	REPLACE	FAN BEARIN	GS: CON	MEN	TS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE	•	CON	имеn	TS:			
COMMENTS:	<u> </u>								
COMMETCIO:									
COOLING COIL	N/A: X	ОК:	REPLACE:	SIZE	:	CNTLVLV	ок:	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	ок:	REPLACE:	SIZE			ок:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	ок:	REPLACE:	SIZE		CNTLVLV	ок:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE	Ξ:	CNTLVLV	ок:	RP- ACT:	RP-BD:
COMMENTS:								RP-ACT = Repla	ace Actuator
								RP-BD = Replac	e Body
		· · · · · · · · · · · · · · · · · · ·							
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE	:				
AHU PUMP SEALS	N/A: X	ок:	REPLACE:	SIZE	:				
COMMENTS:									
	TISTICAL SE	lov	Transcense	Teca	18 4 4 77	TD OLIANIT	TV.		
PIPE INSULATION	N/A: X	OK:	MISSING:			D QUANT			
DUCT INSULATION	N/A: X	OK:	MISSING:	EST	IMAT	ED QUANT	IIY:		
COMMENTS:									

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7920

FILE: 7920.XLS

HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R			110110			NIT - HVAC I			
SZ - Single Zone H&V - Heating & Vntling. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe)				INE, SOUTH	WING, MEZZAN	n) WEST	CATION (M HEATER-	AHU NO.: RC
MZ - Mulitzone	 						FG.:	}	
DD - Dual Duct		4P for 4 Pipe)	4P for 4	2P for 2 Pipe or	an Coil (Indicate	FC - Fa	& Vntltng.	H&V - Hea	
O.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: R.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: E.A. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: E.A. B. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: ZONE DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: COMMENTS: DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: DAMPER N/A: X OK: X REPLACE: SIZE: DPR-ACT OK: RP-ACT: PRACT: RP-ACT:					Reheat System	RHT -	Air Vol.	:VAV - Varia	
R.A. DAMPER					nduction System	IND - Ir	: Γ	UH - Unit H	DD - Dual Duct
E.A. DAMPER	ACT:	OK: RP- ACT	OK:	DPR-ACT	SIZE:	EPLACE:	K:	H	O.A. DAMPER
F. & B. DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP-ACT: ACT:	OK: RP-ACT	OK:	DPR-ACT	SIZE:	EPLACE:		11		
ZONE DAMPER	ACT:	OK: RP- ACT	OK:	1	SIZE:	EPLACE:			
COMMENTS: DPR.ACT = Demper Act		. 11.	11		1			18	
FILTER SECTION N/A: OK: X REPLACE: SIZE: COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: COMMENTS: N/A RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COMMENTS: COMMENTS: N/A COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE:	ACT:	OK: RP- ACT	OK:	DPR-ACT	SIZE:	EPLACE:	K:	N/A: X	
FILTER SECTION N/A: OK: X REPLACE: SIZE: COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BEARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: RETURN AIR FAN OK: REPLACE: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COMMENTS: N/A COMMENTS: OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REPLACE: REPLACE: SIZE: CNTLVLV OK: RP-ACT: REPLAC	OT = Damper Actuator	DPR-ACT = D							COMMENTS:
COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BÉARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COMMENTS: COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R RA-6D = Regitore Body AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: CMTLVLV OK: REPLACE: SIZE: COMMENTS: SIZE: CMTLVLV OK: REPLACE: SIZE: CMTLVLV OK: RP- ACT: R RP-ACT = Regitore Body RP-ACT = Regitore Body RP-BD = Regitore Body RP-BD = Regitore Body RP-BD = R REPLACE: SIZE: SIZE: CMTLVLV OK: R RP-BD = R REPLACE: SIZE: CMTLVLV OK: R RP-BD = R RP-BD = R REPLACE: SIZE: CMTLVLV OK: R RP-BD = R RP-BD	= Replace Actuator	RP-ACT = Rep							
COMMENTS: SUPPLY AIR FAN OK: X REPLACE FAN BÉARINGS: COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COMMENTS: COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R RA-6D = Regitore Body AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: CMTLVLV OK: REPLACE: SIZE: COMMENTS: SIZE: CMTLVLV OK: REPLACE: SIZE: CMTLVLV OK: RP- ACT: R RP-ACT = Regitore Body RP-ACT = Regitore Body RP-BD = Regitore Body RP-BD = Regitore Body RP-BD = R REPLACE: SIZE: SIZE: CMTLVLV OK: R RP-BD = R REPLACE: SIZE: CMTLVLV OK: R RP-BD = R RP-BD = R REPLACE: SIZE: CMTLVLV OK: R RP-BD = R RP-BD					ISIZE:	EPLACE:	K: X	IN/A:	FILTER SECTION
SUPPLY FAN MOTOR OK: X REPLACE: COMMENTS: INLET VANES N/A: X OK: COMMENTS: COMMENTS: RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COMMENTS: COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP- ACT: RP-								<u> </u>	
SUPPLY FAN MOTOR OK: REPLACE: COMMENTS: INLET VANES IN/A: X OK: COMMENTS: RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R RP-ACT = Replace Body RP-ACT = Replace Body RP-ACT = Replace Body R RP-ACT = Replace Body R AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: COMMENTS: N/A: X				тс	ICOMMEN	BEADINGS:	EDI ACE E	JOK: X	SLIPPLY AIR FAN
INLET VANES						DEARINGS.			
RETURN AIR FAN OK: REPLACE FAN BEARINGS: COMMENTS: N/A RETURN FAN MOTOR OK: REPLACE: COMMENTS: N/A COMMENTS: COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R RP-BD = Replace Body AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: CNTLVLV OK: RP- ACT: R RP-BD = Replace Body				13.	COMME	OMMENTS:		JL	
RETURN FAN MOTOR OK: REPLACE: COMMENTS: C		NI/A	ALLA	TO:	ICOMMEN			_fl	
COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: REATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: REPLACE: SIZE: CNTLVLV OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: REPLACE: SIZE: CNTLVLV OK: C						DEARINGS.		<u> </u>	
COOLING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: REPLACE SIZE:	N/A	N/A	15:	COMME		EPLACE:	JUN.	***	
HEATING COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: R RP-ACT: R RP-ACT: R RP-BD = Replace Body RP-BD = Replace Body AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY:									
PREHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: R COMMENTS: GAS-FIRED RP-ACT: R RP-ACT: R AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: COMMENTS: SIZE: COMMENTS:		_11						[3	
REHEAT COIL N/A: X OK: REPLACE: SIZE: CNTLVLV OK: RP-ACT: RP-ACT: RP-ACT: RP-BD = Replace Body AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: CNTLVLV OK: RP-ACT: P-ACT: RP-ACT: RP-ACT: RP-ACT: RP-ACT: RP-ACT: RP-ACT: RP-ACT: RP-ACT: RP-ACT: RP-		N		1				_11	
RP-ACT = Replace Actu			11		1				
AHU PUMP MOTOR	ACT: RP-BD	OK: RP- ACT	JOK:	CNTLVLV	SIZE:	EPLACE:	K:		
AHU PUMP MOTOR N/A: X OK: REPLACE: SIZE: AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY:	= Replace Actuator	RP-ACT = Rep			****			GAS-FIRE	COMMENTS:
AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY:	= Replace Body	RP-BD = Repl	****						
AHU PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: PIPE INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY:								1	
COMMENTS: PIPE INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY:					į .				
PIPE INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY:					SIZE:	EPLACE:	K:	IN/A: X	
									COMMENTS:
				D OUANTITY:	TECTIMAT	ICCINO:	/·	IINI/A ·	DIDE INCLILATION
DOCT HASOLATION		<u> </u>							
COMMENTS:				LU QUANTITY:	IESTIMAT	ISSING:	N	JUV/A.	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY: 7920

			BLDG:	7920		FILE:	7920.XLS	
				AC UPGRADE		TIONS		
AHU NO.:	AHU-1	LOCATIO	, ,	CORE AREA, MEZZAN		*********		
AHU TYPE:	SZ	MFG.:	CARRIER		MODEL:	58CH080		
SZ - Single Zone		ating & Vntltng	,	FC - Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pi	pe)	
MZ - Mulitzone		iable Air Vol.	i	RHT - Reheat System				
DD - Dual Duct	UH - Unit			IND - Induction System		·		
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	-
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	HAS A GA	S-FIRED FU	RNACE SECTIO	N AND A CARRIER DX	COIL		DPR-ACT ≃ Dampi	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK:	REPLACE:	SIZE:	UNIT UNAC	CESSIBLE		
COMMENTS:			1					
SUPPLY AIR FAN	OK: X		FAN BEARING				1	
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
INLET VANES	N/A: X	OK:	COMMENTS					
RETURN AIR FAN	OK:	REPLACE	FAN BEARING	S: COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE	;	COMMEN	NTS:			
COMMENTS:								
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
HEATING COIL	N/A: X	ок:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
COMMENTS:	<u>,,</u>						RP-ACT = Replace	Actuator
			4.				RP-BD = Replace I	Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:	IVA. A	JOIN.	INCI EACE.	JOILL.				
COMMENTS:			,					
	N/A:	OK: X	MISSING:	ICOTINANT	ED QUANTITY:		DETERIOR	ΔΤΙΜΩ
DIDE INCLUATION		IUN. A	IMIODING:				DETERIOR	ATING
PIPE INSULATION			IMICCINIC	I CTIMANT	ED OLIVNITIEM	i		
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			
			MISSING:	ESTIMAT	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG:

7920

FILE:

	AIR I	HANDLIN	G UNIT - H	IVAC UP	GRADE (OBSERVAT	TIONS		
HU NO.:	AHU-2	LOCATIO	N (Rm)	WEST WIN	G, (E) MEZZ	ZANINE			·
HU TYPE:	SZ	MFG.:	CARRIER			MODEL:	58CH080 2		
Z - Single Zone	H&V - Hea	ating & Vntltng].	FC - Fan C	oil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe	e)	
1Z - Mulitzone	VAV - Var	iable Air Vol.		RHT - Rehe	eat System				
D - Dual Duct	UH - Unit	Heater		IND - Induc	tion System				
D.A. DAMPER	N/A:	OK: X	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:		SIZE:	DPR-ACT	OK: X	RP- ACT:	
.A. DAMPER	N/A:	OK: X	REPLACE:		SIZE:	DPR-ACT	OK: N/A	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	O.A. & R.	A. DAMPER I	NTERLINKED.	ELECTRIC D	AMPER AC	TUATOR.		DPR-ACT = Damp	er Actuator
								RP-ACT = Replac	e Actuator
ILTER SECTION	N/A:	OK: X	REPLACE:		SIZE:				
COMMENTS:	FILTERS				- I. T. T. T. T. T. T. T. T. T. T. T. T. T.				-
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARIN	GS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE			COMMEN	TS:	~1/2 HP		
NLET VANES	N/A: X	OK:	COMMENT	S:	<u> </u>			· · · · · · · · · · · · · · · · · · ·	
RETURN AIR FAN	OK:	REPLACE	FAN BEARIN	GS:	COMMEN	TS:	N/A	······································	
RETURN FAN MOTOR	OK:	REPLACE			COMMEN				
COMMENTS:	GAS FIRE	D FURNACE					****		
COOLING COIL	76.774	Tou. V	IDED AGE		Toler-				
HEATING COIL	N/A: N/A: X	OK: X	REPLACE:	DX	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X N/A:	OK:	REPLACE:		SIZE:	CNTLVLV	OK: OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A:	OK:	REPLACE:		SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD:
OMMENTS:			NDENSOR OF	IDOOF	JSIZE.	CNILVLV	Jor.		
OMMENTS.	CONFRE	330K3 & CC	INDENSOR OF	ROOF				RP-ACT = Replace	
HU PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:				
COMMENTS:									
PIPE INSULATION	N/A:	JOK: X	MISSING:		IESTIMATI	ED QUANTITY:		DETERIOR	RATING
DUCT INSULATION	N/A: X	OK:	MISSING:	·····		ED QUANTITY:			
COMMENTS:	<u> </u>	10	Innocired.		LOTIMATI	LO GOMITTI I.			
									new

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7920

FILE:

			3 UNIT - HVAC U					
NHU NO.:	MAU-1	LOCATIO	\ /		MEZZANINE, E			
AHU TYPE:	MAU	MFG.:	SPACE AIR (GAS-FI		MODEL:	218-HH		
SZ - Single Zone		ating & Vntltn	•		2P for 2 Pipe or	4P for 4 Pipe	:)	
MZ - Mulitzone		iable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit I			nduction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	ELECTRIC	CACTUATOR	R ON OA				DPR-ACT = Dampe	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	IOK: X	RÉPLACE:	SIZE:				
COMMENTS:		TOIL X	JILLI DIOL.	12.22.	,			
OUNIVIEW 19.						*****		
SUPPLY AIR FAN	OK: X	REPLACI	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACI		COMMEN	NTS:			
NLET VANES	N/A: X	lok:	COMMENTS:	1				
RETURN AIR FAN	OK:	REPLAC	FAN BEARINGS:	COMMEN	NTS:	N/A	<u></u>	******
RETURN FAN MOTOR	OK:	REPLAC		COMMEN		N/A		
COMMENTS:	1L	MARATHON,						
OOMINICATO.		04,000 BTU						
	114 01 1,1	104,000 1101	***************************************			-		
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	ок:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	GAS-FIRE	D					RP-ACT = Replace	Actuator .
							RP-BD = Replace	Body
·····								

AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			·····	
COMMENTS:			•					
DIDE INCLUATION	N/A: X	OK:	MISSING:	ESTIMAT	FED QUANTITY:			
PIPE INSULATION		101/	MISSING:	IESTIMAT	TED QUANTITY:			
PIPE INSULATION DUCT INSULATION	N/A: X	OK:	MISSING:	LOTHNA	LD QUANTITI			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7920

FILE:

			BLDG:	7920		FILE:	7620.XLS	
			3 UNIT - HVAC			IONS		
AHU NO.:	MAU-2	LOCATIO		ST WING, MEZZAN	INE, SOUTH			
AHU TYPE:	MAU	MFG.:	SPACE AIR		MODEL:	221-HH		
SZ - Single Zone	H&V - Hea	ating & Vntltng	j. FC	- Fan Coil (Indicate 2	P for 2 Pipe or	4P for 4 Pipe	:)	
MZ - Mulitzone		iable Air Vol.		T - Reheat System				
DD - Dual Duct	UH - Unit I	Heater	IND	- Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
COMMENTS:	CFM = 20	,900M BTU IN	!PUT = 1,590,000	<u> </u>			DPR-ACT = Damp	er Actuator
	10 HP RE	LIANCE, ELE	CTRIC ACTUATORS	, ELECTRIC CONTR	ROL.		RP-ACT = Replace	a Actuator
			FIRE, NO EXHAUST					
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:	······································			
COMMENTS:	IL	<u></u>						
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	TS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
INLET VANES	N/A: X	OK:	COMMENTS:	Toommen				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	TC.	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
		REPLACE	··	COMMEN	15.	IN/A		
COMMENTS:								
COOLING COIL	N/A: X	OK:	REPLACE:	Total	FOUTING	Tiou	IDD AGE	Too 55
HEATING COIL	N/A: X N/A:	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: OK: X	RP- ACT:	RP-BD:
HEATING COIL	IIIN/A.				CNTLVLV	OK: X	RP- ACT:	RP-BD:
DREHEAT COIL	N/A· V	17.342 -						IRP-BIL
	N/A: X	OK:	REPLACE:	SIZE:			RP- ACT:	1
PREHEAT COIL REHEAT COIL	N/A: X N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL			1				RP-ACT:	RP-BD:
REHEAT COIL			1				RP- ACT:	RP-BD:
REHEAT COIL			1				RP-ACT:	RP-BD:
REHEAT COIL COMMENTS:	N/A: X	ок:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	ок:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	ОК:	RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X	OK:	REPLACE:	SIZE: SIZE: SIZE:		ОК:	RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV ED QUANTITY:	OK:	RP-ACT:	RP-BD:
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV ED QUANTITY:	OK:	RP-ACT:	RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG: **7920**

FILE:

REFRI	GERAT	ION EQ	UIPMENT - HV	AC UPGRADE OBSERVATIONS
CHILLER / EQUIP. N	0.	CH-2	LOCATION (RM)	ON ROOF (SERVES AHU-2)
REFG. EQUIP. TYPE			MFG.: CARRIE	
				= Reciprocating w/ Air Cooled Condensing Unit
R-WCT = Reciproca	ating w/ V	Vater Side		CT = Absorption w/ Water Side Cooling Tower
ACCU = Air Cooled	Condens	ing Unit	CT = C	ooling Tower
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:				
COOLING TOWER	N/A:	OK:	REPLACE:	SIZE:
AIR COOLED COND		OK:	REPLACE:	SIZE:
COMMENTS:	<u> </u>			
OOMMENT OF				
CHILLER INSUL.	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:
CHW PIPE INSUL.	N/A:	lok:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:	<u> </u>			
COMMUNICIATO.				A CONTRACT OF THE CONTRACT OF

CHW PUMP MOTOR	N/A:	ок:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:
CHW PUMP MOTOR	N/A:	ок:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:
	N/A:	ок:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	ок:	REPLACE:	SIZE:
CHW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
CHW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:	• L			
	SOUTH	BAY - CAR	RIER 38TG030500,	208V @ 9.5 AMP COMPRESSOR

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

AJN

CHECKED BY:

AJN

BLDG:

7920

FILE:

	REFRIGE	RATION E	QUIPME	NT - HVA	UPGR	ADE OBS	ERVATIONS	
CHILLER / EQUIP. NO.	ACCU 1-3		LOCATION	(RM)	ON ROOF			
REFG. EQUIP. TYPE:		ACCU'S	MFG.:	HEATWAVE		MODEL:	CTD904	
C-WCT = Centrifugal w	/ Water Side C	Cooling Tower		R-ACCU = F	eciprocating	w/ Air Coole	d Condensing Unit	
R-WCT = Reciprocating	w/ Water Sid	e Cooling Towe	er	ASB-WCT =	Absorption	w/ Water Side	Cooling Tower	
ACCU = Air Cooled Cor	ndensing Unit			CT = Cooling	Tower			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:			
COMMENTS:	1/2 HP CC	ND FANS - 2 E	A, 1 OF 3 O	V SE BAY				
	440V - 16.	5 AMP COMPF	RESSORS					
COOLING TOWER	N/A:	OK:	REPLACE:		SIZE:			
AIR COOLED COND.	N/A:	OK:	REPLACE:		SIZE:			
COMMENTS:								
CHILLER INSUL.	TIN I / A	lov	Turonino		leozuwae	5 SHADELEY		
CHILLER INSUL.	N/A:	ОК:	MISSING:		1.	D QUANTITY		
	N/A:	ОК:	MISSING:		ESTIMATE	D QUANTITY	/ ;	
COMMENTS:			4					
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A:	ок:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
COMMENTS:	2 OF 3 -	TRANE OAL	UA-252-B		I	· · · · · · · · · · · · · · · · · · ·		
		230V - 2.2A	COND. FAN.					
			A COMPRES					***
	SOUTH B	AY - CARRIER	38TG030500	, 208V @ 9.5 /	MP COMP	RESSOR		**************************************

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/13/94 PREPARED BY: JM/AJN/AMS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 8390 BLDG NAME: TAC EQUIP SHOP

ELECTRIC METER: Y

GAS METER: Y

SUSPECT ACM: N

CONDITIONED SQFT:

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

TUE: WED: THUR: FRI: SUN: MON: 0 0 PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 ____ 7 ___ 7 7 7 0 REQ START: 7 REQ STOP: 0 18 18 18 18 18

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

ALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

7 (11 (1 17 (1 (DENTO CITIT CONTET OF	OLIVATIONO
	390	
AHU NUMBER: A	HU-1 AHU LOCATIO	N: MER
REFRIG SYS # SRVNG AHU:	CH-1 SERVES AREA: % OF BLDG AREA HEATED:	
AHU UNIT TYPE SINGLE ZO	NE N	UMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	3,475 CFM-CLG :	3,475
MIN %OA:	10 MAX %OA:	
NAMEPLATE	Victoria de la companio del companio de la companio del companio de la companio della companio de la companio della companio d	
UNIT MFG: TRA	.NE UI	NIT MODEL:
SUPPLY FAN HP:	3 RET/E)	XH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN	MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN M	TR MODEL:
COMMENTS:		
COILS		
Coil	Coil Type Modulating	g Valve?
PREHEAT COIL: NO	NE 🔲	
	「WATER ☑	
REHEAT COIL: NO	VE 🔲	
HUMIDIFIER: NO	NE 🔲	
COOLING COIL: DX		
SCHEDULE		
DAY SCHEDULE NO:	51	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN: MO	N: TUE: WED: THUR: FRI:	SAT:
PRES START: 0	0 0 0 0	0
	24 24 24 24 24	24
REQ START: 0	7 7 7 7 7	<u> </u>
REQ STOP: 0 1	8 18 18 18 18	0
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONTROLS		MOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC	COLI	T DECK DEG F: 0 D DECK DEG F: 0
PRESENT TEMP WINTR UNOC	0 MIX	KED AIR DEG F: 0
PRESENT TEMP SUM OCC PRESENT TEMP SUM UNOCC		OINT DESCRIP: IPOINT DEG F: 0
MIN OA DMPR CONTROL:	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL:	=	
RET AIR DMPR CONTROL:	=	
EXH AIR DMPR CONTROL:		
OTHER CONTROLS DESCR	:	
CONTROLS COMMENTS		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: JM/AJN/AMS

LOCATION: FT. RILEY, KS

AIR DA	INDLING UNIT	SURVETUDO	PERVAIN	JNO	
BUILDING NUMBER:	8390				
AHU NUMBER:	HV-1	AHU LOCATION	: 102		
REFRIG SYS # SRVNG AHL		SERVES AREA:	1ST FLR OFFIC		
	% OF B	LDG AREA HEATED:		12	
AHU UNIT TYPE HEATIN	G AND VENTILATING	NU	MBER OF ZONE	ES IF MZ UNIT:	<u></u>
CFM-HTG:	3,345	CFM-CLG:		0	
MIN %OA:	33	MAX %OA:		100	
NAMEPLATE					
UNIT MFG:		UNI	T MODEL:	:	
SUPPLY FAN HP:	1.5	RET/EXI	I FAN HP:	0	
SUPPLY FAN MTR MFG:		RET/EXH FAN I	MTR MFG:		
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTI	R MODEL:		
COMMENTS:					
COILS					
Coil	Coil Type	Modulating \	Valve?		
PREHEAT COIL:	NONE				
	HOT WATER				
REHEAT COIL:	NONE				
-	NONE				
	NONE				
SCHEDULE					
DAY SCHEDULE NO:	51		MONTH SCH	DIII E NO:	1
SCHEDULE COMMENTS:			MONTH COM	DOLL NO.	<u>.</u> _
SUN:	MON: TUE: WED:	THUR: FRI: S	SAT:		
PRES START: 0	0 0 0	0 0	0,		
PRES STOP: 24	24 24 24	24 24	24		
REQ START: 0	7 7 7	7 7	0		
REQ STOP: 0	18 18 18	18 18	0		
MONTHS JAN: FEB: M ON:	AR: APR: MAY: JU	JN: JUL: AUG:	SEP: OCT:	NOV: DEC:	
					_
CONTROLS	wa.				
TYPE OF CONTR	OLS: ELECTRIC		OSTAT TYPE:	SINGLE SETPOINT	
PRESENT TEMP WINTR	occ:):	DECK DEG F:	0	
PRESENT TEMP WINTR UN	occ:)	DECK DEG F:	0	
		→ MIXE	D AIR DEG F:		
PRESENT TEMP SUM PRESENT TEMP SUM UN		=	OINT DESCRIP:	0	
MIN OA DMPR CONTROL:	N MIXED AIR DI	MPR CONTROL: Y	IMPLEMENT [DEMAND LIMIT CNT	RLS? N
MAX OA DMPR CONTROL:	 	DB CONTROL: N		TIME CLO	OCK: N
RET AIR DMPR CONTROL:		WB CONTROL: N	TIME	CLOCK OPERATION	IAL? N
EXH AIR DMPR CONTROL:	N				<u> </u>
OTHER CONTROLS DE	SCR:				
CONTROLS COMME					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

ON **EMC NO**: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING NUMBER: AHU NUMBER:		AHU LOCATION:	MAINT RAY	
REFRIG SYS # SRVNG AH				
REFRIG 515 # SKVNG AH		SERVES AREA: MA BLDG AREA HEATED:	AINT. BAY	
AHU UNIT TYPE MAKE-U	JP AIR UNIT	NUMB	ER OF ZONES IF MZ UNIT:	0
CFM-HTG:	4,700	CFM-CLG:	0	
MIN %OA:	100	MAX %OA:	100	
NAMEPLATE				
UNIT MFG:		UNIT M	ODEL:	
SUPPLY FAN HP:	1.5	RET/EXH FA	AN HP: 0	
SUPPLY FAN MTR MFG:		RET/EXH FAN MTF		
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR M	ODEL:	
COMMENTS:				
COILS				
Coil	Coil Type	Modulating Valv	/e?	
PREHEAT COIL:	NONE			
	HOT WATER			
	NONE	<u>L</u>		
	NONE			
	TOTAL	⊔		
SCHEDULE				
DAY SCHEDULE NO:	51	M	ONTH SCHEDULE NO:	1
SCHEDULE COMMENTS:				
SUN:	MON: TUE: WED:	THUR: FRI: SAT	•	
PRES START: 0	0 0 0		0	
PRES STOP: 24	24 24 24	24 24 24		
REQ START: 0 PREQ STOP: 0	$\frac{7}{18}$ $\frac{7}{18}$ $\frac{7}{18}$		0 0	
ALGOTOT		10 10	<u>v</u>	_;
	MAR: APR: MAY: J	UN: JUL: AUG: SE	P: OCT: NOV: DEC:	
ON:				
				1
CONTROLS				:
CONTROLS	ROLS: ELECTRIC	THERMOST	TAT TYPE: SINGLE SETPOINT	
CONTROLS	ROLS: ELECTRIC	THERMOST	TAT TYPE: SINGLE SETPOINT	
CONTROLS TYPE OF CONTR	ROLS: ELECTRIC	THERMOST HOT DEC	TAT TYPE: SINGLE SETPOINT	
CONTROLS TYPE OF CONTR PRESENT TEMP WINTR	ROLS: ELECTRIC OCC: (OCC)	THERMOST HOT DEC	TAT TYPE: SINGLE SETPOINT CK DEG F: 0 CK DEG F: 0 AIR DEG F: 0	
TYPE OF CONTR PRESENT TEMP WINTR PRESENT TEMP WINTR UN	ROLS: ELECTRIC OCC: (OCC: THERMOST HOT DEC	FAT TYPE: SINGLE SETPOINT CK DEG F: 0 CK DEG F: 0 MIR DEG F: 0 DESCRIP:		
TYPE OF CONTR PRESENT TEMP WINTR PRESENT TEMP WINTR UN PRESENT TEMP SUM	ROLS: ELECTRIC OCC: (OCC: THERMOST HOT DEC COLD DEC MIXED A O OTHER SETPOINT OTHER SETPOIN	FAT TYPE: SINGLE SETPOINT CK DEG F: 0 CK DEG F: 0 MIR DEG F: 0 DESCRIP:		
TYPE OF CONTR PRESENT TEMP WINTR PRESENT TEMP WINTR UN PRESENT TEMP SUM PRESENT TEMP SUM UN MIN OA DMPR CONTROL: MAX OA DMPR CONTROL:	ROLS: ELECTRIC OCC: OCC: OCC: OCC: OCC: OCC: OCC: OC	THERMOST HOT DEC COLD DEC MIXED A O OTHER SETPOINT OTHER SETPOIN	TAT TYPE: SINGLE SETPOINT CK DEG F: 0 CK DEG F: 0 MIR DEG F: 0 DESCRIP: 0 IPLEMENT DEMAND LIMIT CNT TIME CL	RLS? N OCK: N
TYPE OF CONTR PRESENT TEMP WINTR PRESENT TEMP WINTR UN PRESENT TEMP SUM PRESENT TEMP SUM UN MIN OA DMPR CONTROL: MAX OA DMPR CONTROL: RET AIR DMPR CONTROL:	ROLS: ELECTRIC OCC: OCC: OCC: OCC: OCC: OCC: OCC: OC	THERMOST HOT DEC COLD DEC MIXED A D OTHER SETPOINT O OTHER SETPOIN	TAT TYPE: SINGLE SETPOINT CK DEG F: 0 CK DEG F: 0 AIR DEG F: 0 DESCRIP: NT DEG F: 0 IPLEMENT DEMAND LIMIT CNT	RLS? N OCK: N
TYPE OF CONTR PRESENT TEMP WINTR PRESENT TEMP WINTR UN PRESENT TEMP SUM PRESENT TEMP SUM UN MIN OA DMPR CONTROL: MAX OA DMPR CONTROL:	ROLS: ELECTRIC OCC: OCC: OCC: OCC: OCC: OCC: OCC: OC	THERMOST HOT DEC COLD DEC MIXED A D OTHER SETPOINT D OTHER SETPOIN MPR CONTROL: N	TAT TYPE: SINGLE SETPOINT CK DEG F: 0 CK DEG F: 0 MIR DEG F: 0 DESCRIP: 0 IPLEMENT DEMAND LIMIT CNT TIME CL	RLS? N OCK: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/13/94
PREPARED BY: JM/AJN/AMS

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

PREPARED DT. JIVI/AJIVI/

AIR HANDLING UNIT S	SURVEY C	JBSEKVA	ATIONS
---------------------	----------	---------	--------

										_					
	E		S NUMBER					AHU L	OCATION	i: MAII	NT. BAY			- .	
	DEEDI														
	REFRI	G SYS#	SRVNG AI	HU: <u>N</u> C	ONE	% C	: OF BLDG	SERVE:	S AREA: IEATED:	IVIAINI	. BAT		10		
	AHU (JNIT TYF	PE MAKE	-UP AIR	UNIT		·		NU	JMBER (OF ZONI	ES IF MZ	UNIT:	0	
<u>L.</u>			FM-HTG:	,	4	1,700		CI	-M-CLG:	:		0			
		r	VIIN %OA:			100		MA	XX %OA:			100			
NA	MEF	PLAT	E												
		U	NIT MFG:						UN	IT MODE	EL:				
		SUPPLY	FAN HP:			1.5			RET/EX				0		
•			MTR MFG:						EXH FAN						
St	JPPLY		MODEL:					KE I/EA	I FAN MT	K WOOD		· · · · · · · · · · · · · · · · · · ·			
CC	ILS														
		Со	il		Coil Type	€		Мо	dulating	Valve?					
		PREHE	AT COIL:	NONE											
			NG COIL:												
			AT COIL:					H							
			NG COIL:					_ 5							
SC	HFΓ	ULE													
		SCHEDL	JLE NO:	51						MON	TH SCH	EDULE N	O:	1	
S		LE COMI	=												
			SUN:	MON:	TUE:	WE		UR:		SAT:					
.	PRES S		0	0	0		0	$\frac{0}{24} =$	0	0					
		STOP: START:	24	<u>24</u> 7	<u>24</u>		7	<u>24</u>	<u> 24</u> 7	<u>24</u> 0					
		STOP:	0	18	18		18	18	18	0					
МО	NTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:		
	ON:	\boxtimes	\boxtimes	\boxtimes	\boxtimes							\boxtimes			
CC	NTF	ROLS	i					-							
		TYPE	OF CONT	ROLS:	ELECTF	RIC				OSTAT		SINGLE	SETPOIN		
	PRE	SENT TE	MP WINT	R OCC:			0			DECK I				<u>0</u> 0	
	PRESE	NT TEMP	WINTR U	NOCC:			0			ED AIR I				0	
	PI	RESENT	TEMP SUI	M OCC:			0	OTHE	R SETPO	INT DE	SCRIP:				
	PRES	SENT TE	MP SUM U	NOCC:			0	ОТ	HER SET	POINT D	EG F:			0	
			CONTROL				-	CONTRO		IMPLE	EMENT	DEMAND			===
			CONTROL					CONTRO	=		₩122 F	כן ספע י		CLOCK:	=
			CONTROI		ECC	NOMIZ	LEK WB	CONTRO	DL: [N]		IIME	CLOCK	OPERATI	UNAL?	N
			NTROLS E												
		CONTRO	DLS COM	MENIS:	i									1	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING NUMBER: 83 AHU NUMBER: UH	THE RESERVE THE RE	AHU LOCATION: MAINT. BA	Y NORTH
REFRIG SYS # SRVNG AHU:	NONE S	SERVES AREA: MAINT. BAY	NORTH
		REA HEATED:	23
AHU UNIT TYPE UNIT HEATE	R	NUMBER OF ZOI	NES IF MZ UNIT: 0
CFM-HTG:	11,200	CFM-CLG:	0
MIN %OA:	0	MAX %OA:	0
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	1	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: COMMENTS:	RI	ET/EXH FAN MTR MODEL:	
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: NON	E	_ 🗆	
HEATING COIL: HOT	WATER	-	
REHEAT COIL: NON	E		
HUMIDIFIER: NON			
COOLING COIL: NON	E	<u>:</u> U	
SCHEDULE			
DAY SCHEDULE NO: 5	1	MONTH SCH	HEDULE NO: 1
SCHEDULE COMMENTS:			
SUN: MON			
PRES START: 0 24 2	$\frac{0}{4} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	
	$\frac{1}{7} = \frac{24}{7} = \frac{24}{7} = \frac{2}{7}$	$\frac{24}{7} = \frac{24}{7} = \frac{24}{0}$	
REQ STOP: 0 1		18 18 0	
MONTHS JAN: FEB: MAR: ON:		JUL: AUG: SEP: OCT	: NOV: DEC:
CONTROLS			
TYPE OF CONTROLS	: ELECTRIC	THERMOSTAT TYPE:	SINGLE SETPOINT
PRESENT TEMP WINTR OCC	: 0	HOT DECK DEG F: COLD DECK DEG F:	0
PRESENT TEMP WINTR UNOCC	. 0	MIXED AIR DEG F:	0
PRESENT TEMP SUM OCC		OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM UNOCC	•	OTHER SETPOINT DEG F:	0
MIN OA DMPR CONTROL: N	1	<u></u>	DEMAND LIMIT CNTRLS? N
RET AIR DMPR CONTROL: N	ECONOMIZER DB CO		TIME CLOCK: N
EXH AIR DMPR CONTROL: N	-	ONTROL: [N] TIM	E CLOCK OPERATIONAL? N
OTHER CONTROLS DESCR			
CONTROLS COMMENTS	• •		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/13/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING NUMBER: 8390 AHU NUMBER: UH-2	AHULOCATION	: MAINT, BAY SOUTH
REFRIG SYS # SRVNG AHU: NO	NE SERVES AREA: % OF BLDG AREA HEATED:	23
AHU UNIT TYPE UNIT HEATER	NU	IMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	11,200 CFM-CLG:	0
MIN %OA:	0 MAX %OA:	0
NAMEPLATE		
UNIT MFG:	UNI	T MODEL:
SUPPLY FAN HP:	1 RET/EXI	H FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN I	MTR MFG:
SUPPLY FAN MTR MODEL: COMMENTS:	RET/EXH FAN MTI	R MODEL:
COILS		
Coil	Coil Type Modulating \	Valve?
PREHEAT COIL: NONE		
HEATING COIL: HOT W	ATER	
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: NONE	U	
SCHEDULE		
DAY SCHEDULE NO: 51		MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI:	SAT:
PRES START: 0 0	0 0 0 0	0
PRES STOP: 24 24	24 24 24 24	24
REQ START: 0 7	7 7 7	
REQ STOP: 0 18	18 18 18 18	0
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
on:		
CONTROLS		
TYPE OF CONTROLS:		OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0	DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0,	DECK DEG F: 0 ED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPO	
PRESENT TEMP SUM UNOCC:		POINT DEG F: 0
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL: N		
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: JM/AJN/AMS

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER: 8390	BOILER RM LOCATION: MER
BOILER UNIT	
SOURCE OF BLDG HEAT	BLR/CONVERTER SERVES AREA OR SERVICE: ALL
BOILER TAG: BIR	CONVERTER
BOILER TAG: BLR- BOILER TYPE: HW (
FUEL TYPE: NAT.	
CENTRAL PLANT DIRE	СТ
NAMEPLATE	% AREA HEATED BY BB RADIATION:
BOILER MFG: AJAX	BLR CAP OUTPUT (BTUH): 2,600,000
UNIT MODEL: WGFD3250	BLR CAP INPUT (BTUH): 3,250,000
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO:	MONTH SECHDULE NO: 1
SCHEDULE COMMENTS:	
	MON: TUE: WED: THUR: FRI: SAT:
PRES START: 0	
PRES STOP: 24	$\frac{24}{7} = \frac{24}{7} $
REQ START: 0 REQ STOP: 0	$\frac{7}{18} = \frac{7}{18} = \frac{7}{18} = \frac{7}{18} = \frac{0}{18}$
KEQUIOI	10 10 10 10 0
	AR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🗵 🗵 [
CONTROLS	·
TYPE OF BLR CONTR	DLS: ELECTRIC RESET CONTROLS: Y
OPERATING SETPO	DINT: 190 DEG F or PSIG
TYPE OF BURNER CONTR	DLS:
CONTROLS COMME	NTS:
HW PUMP	
PUMP TAG: 1	PUMP HP: 15 PUMP MFG: U S ELECTRIC
PUMP SERVICE: HW PUMP	PUMP MODEL : GB06200151L021R060

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: JM/AJN/AMS

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	8390			1	BLDG N	IAME:	TAC EQ	UIP SHO)P			
PER RAD	(SYSTE	M TAG) N	D: RAD)-1			RAD	SYS LOCA	ATION:	PERIMET	ER OFFI	CES	
so	URCE OF	F HEATIN	G:			:		SERVES	AREA:	1ST 2ND	FLOORS		
RAD	NOITAI	UNIT TYP	E: HW					% AREA	A HTG:		11	<u></u>	
SCHEE	ULE												
DA	YS SCH	EDULE N	o:	5	1	MOI	NTHS S	CHEDULI	E NO:		1		
SCHE	DULE C	OMMENT	s:										
		SUN:	MON:	TUE	: W	ED: TH	IUR:	FRI:	SAT:				
PRES S	TART:	0	0		0	0	0	0	0				
PRES	STOP:	24	24	2	4	24	24	24	24				
REQ S	TART:	0	7		7	7	. 7	7	0				:
REQ	STOP:	0	18	1	8	18	18	18	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL	: AUG:	SEP	OCT:	NOV:	DEC:	
ON:			\boxtimes							\square			
CONTR	ROLS	,											
TY	PE OF F	RAD. CON	TROLS:	ELEC	TRIC								
	RADIA	TION CO	NTROL:										
	00	C HT SPA	CE SP		0								
		C HT SPA			0			F	RESET	CONTROL	: N		
	CONTR	ROL COM	MENTS:										_

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/13/94

PREPARED BY: JM/AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 8390)	BLDG NAME:	TAC EQUIP SHOP		
REF. UNIT NUMBER/TAG	6: CH-1		LOCATION (MER#): OUTSIDE	
			AHU'S SE		
UNIT	TTYPE AIR COOLED	CONDENSING I	UNIT, DX		
NAMEPLATE					
CHILLER MFG:	TRANE		TOWER MFG:	COMPRESSOR	
CHILLER MODEL:	RAUCB754B		# OF TOWER FANS:		2
CHILLER SERIAL NO:			TOWER FAN V:		0
CHILLER V:	480)	TOWER FAN AMPS:		2.7
CHILLER AMPS:	12.3	}	TOWER FAN HP:		0.33
CHILLER PH:	0				
CHILLER CAP (TONS):	8	3			
COMMENTS:	:				
SCHEDULE					
DAYS SCHEDULE SCHEDULE COMME	****		MONTHS SCHEDU	JLE NO: 2	
PRES STOP: 24 REQ START:	0 0 0	24 2	$ \begin{array}{c cccc} 0 & 0 & 0 \\ 4 & 24 & 24 \\ 7 & 7 & 0 \end{array} $:
MONTHS JAN: FEB:	: MAR: APR: MA	AY: JUN:	JUL: AUG: SEP	: OCT: NOV:	DEC:
ON:		\boxtimes			
CONTROLS					
TYPE OF CONTE	ROLS: ELECTRIC				

CWS SET		0	CNWS SETPOINT		<u>O</u>
CWR SET	POINT:	0	CNWR SETPOINT	:	0
PRESS L PRESS LITE PRESS GA	LOW: N TE	TEMP LITE HI: MP LITE LOW: EMP GAUGES:	N OTHER IN N	DICATIORS:	
CONTROLS CO	OMMENTS:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

8390

FILE:

PERIN	METER RA	ADIATION - H'	/AC UPGRADE	E OBSERV	ATIONS	5		
PR-1	LOCATIO			ST SIDE				
PR	MFG.:			MODEL:				
H&V - He	eating & Vntltr	ng. Fo						
VAV - Va	riable Air Vol.		•					
UH - Unit	t Heater	:1/	D - Induction System					
N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	- 11	RP- ACT:		
N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	- 11	RP- ACT:		
N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	11			
N/A:	OK:				13			
N/A:	OK:				OK:	RP- ACT:		
ZONE C	ONTROL VAL	VE (2-WAY PNEUN	IATIC, 1/2") NEEDS T	ГО ВЕ		DPR-ACT = Damp	er Actuator	
REPLAC	ED. PHOTO	#5. TYPICAL OF C	THERS		4	RP-ACT = Replace	Actuator	
INI/A:	IOK:	IREDI ACE:	ISI7E:					
	Jon.	INC. LACE.	JIZL.					
			1000					
ПОК:	REPLAC	E FAN BEARINGS:	COMMEN	ITS:				
			COMMEN	ITS:				
			ICOMMEN	JTS:				
	INEI DAG	· L .	TOOMMEN					

N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
N/A:	ок:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
N/A:	ок:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
N/A:	ок:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
						RP-ACT = Replace	Actuator	
						RP-BD = Replace	Body	
N/A:	OK:	REPLACE:	SIZE:					
N/A:	OK:	REPLACE:	SIZE:					
N/A:	OK:	MISSING:	ESTIMAT	ED QUANTITY				
	PR-1 PR H&V - He VAV - Va UH - Unit N/A: N/A: N/A: N/A: N/A: N/A: OK: OK: OK: OK: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A	PR-1 LOCATIC PR MFG.: H&V - Heating & Vntltr VAV - Variable Air Vol UH - Unit Heater N/A: OK: N/A: OK: N/A: OK: N/A: OK: N/A: OK: OK: N/A: OK: OK: OK: OK: REPLACED. PHOTO OK: REPLACED. REPLACED. OK: REPLACED. REPLACED. OK: OK: OK: OK:	PR-1 LOCATION (Rm) ST PR MFG.: H&V - Heating & Vntltng. VAV - Variable Air Vol. UH - Unit Heater IN N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: OK: REPLACE: OK: REPLACE: OK: REPLACE: N/A: OK: COMMENTS: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE: N/A: OK: REPLACE:	PR-1 LOCATION (Rm) STORAGE ROOM, WE PR MFG.: H&V - Heating & Vntiting. FC - Fan Coil (Indicate VAV - Variable Air Vol. RHT - Reheat System UH - Unit Heater IND - Induction System IND. Induction System INDUction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction Induction	PR-1 LOCATION (Rm) STORAGE ROOM, WEST SIDE PR MFG.: MODEL: H&V - Heating & Vntitng. FC - Fan Coil (Indicate 2P for 2 Pipe or VAV - Variable Air Vol. RHT - Reheat System UH - Unit Heater IND - Induction System N/A: OK: REPLACE: SIZE: DPR-ACT OK: REPLACE: SIZE: DPR-ACT OK: REPLACE: SIZE: CMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: SIZE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE: SIZE: SIZE: CNTLVLV N/A: OK: REPLACE: SIZE:	PR-1 LOCATION (Rm) STORAGE ROOM, WEST SIDE PR MFG.: MODEL: H&V - Heating & Vntiting. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pi VAV - Variable Air Vol. RHT - Reheat System UH - Unit Heater IND - Induction System PERIME IN/A: OK: REPLACE: SIZE: DPR-ACT OK: N/A: OK: REPLACE: SIZE: COMMENTS: OK: REPLACE: SIZE: COMMENTS: OK: REPLACE: SIZE: COMMENTS: OK: REPLACE: SIZE: CNTLVLV OK: N/A: OK: REPLACE: SIZE: SIZE: CNTLVLV OK: N/A: OK: REPLACE: SIZE: SIZE: SIZE: CNTLVLV OK: N/A: OK: REPLACE: SIZE: SIZ	PR	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

8390

FILE:

	AID II	A NIDL ING	NIMIT UNIACI	BODADE C	NDCED\/AT	FILE:	8390.XLS	
AHU NO.:			S UNIT - HVAC U			IONS		
AHU NO.: AHU TYPE:	H&V-1	LOCATIO MFG.:	1 /	AGE ROOM - WE		TODIVEN	T TVDE 0	
	H&V		TRANE	0 1/1 1/2 1/2	MODEL:	TORIVEN		
SZ - Single Zone		iting & Vntltng		an Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe;)	
MZ - Mulitzone DD - Dual Duct		able Air Vol.		Reheat System				
	UH - Unit I			nduction System		-1/		
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	MINIMUM	POSITIONE	R ON ACTUATOR OA I	DAMPER AND R	A DAMPER		DPR-ACT = Damp	er Actuator
	INTERLO	CKED					RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	IOK:	IREPLACE:	SIZE:				
COMMENTS:	IN/A:	JUN:	INEPLACE.	JOIZE.				
COMMENIS:								
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN		2 HP		
INLET VANES	N/A: X	IOK:	COMMENTS:	10011111211		4 1 11		:
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	TS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN				
COMMENTS:		11121 2102		TOOMINIEN				
001111121110.								·
COOLING COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: N/A;	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT:	RP-BD:
PREHEAT COIL				1			1	RP-BD:
PREHEAT COIL REHEAT COIL				1			RP- ACT:	RP-BD:
PREHEAT COIL REHEAT COIL				1			RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS:	N/A:	OK:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:			RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A:	OK:	REPLACE:	SIZE: SIZE: SIZE:		OK:	RP-ACT:	RP-BD:
PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

8390

FILE:

	AIR H	IANDLIN	G UNIT - H	AC UPGRADE	OBSERVA"	TIONS		
AHU NO.:	MAU-1&2	LOCATIO		CEILING				
HU TYPE:	MAU	MFG.:	TRANE	MODEL:			IZE 8, TYPE C	F-B
Z - Single Zone	H&V - Hea	ting & Vntltng		FC - Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
1Z - Mulitzone	VAV - Varia	able Air Vol.		RHT - Reheat System				
D - Dual Duct	:UH - Unit H	Heater		IND - Induction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
OMMENTS:	PNEUMAT	TC					DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
ILTER SECTION	N/A:	JOK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARING	S: COMMEN	ITS:	2 HP MAI	RATHON	
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:		and the state of t	
NLET VANES	N/A: X	IOK:	COMMENTS					
RETURN AIR FAN	OK:		FAN BEARING		ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:								
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
EATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:X	RP-BD:X
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
EHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	3-WAY PN	IEUMATIC C	ONTROL VALVE	@ 1" PIPE SIZE			RP-ACT = Replac	
							711 25 Tropics	
HU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	ок:	REPLACE:	SIZE:				
COMMENTS:		<u></u>				_4.114		
PIPE INSULATION	N/A:	OK: X	MISSING:	JESTIMAT	ED QUANTITY			
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY			
JUMMEN 181								
COMMENTS:	·							

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: NLA NLA

BLDG:

8390

FILE:

	AIR	HANDLIN	G UNIT - HVAC	UPGRADE (OBSERVAT	TIONS		
AHU NO.:	AHU-1	LOCATIO						
AHU TYPE:	SZ	MFG.:	***************************************		MODEL:			
SZ - Single Zone	H&V - Hea	ating & Vntltng	j. FC - F	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipi	 ⊕)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	:UH - Unit	Heater	IND - I	nduction System				
O.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	*
R.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	*
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	*ACTUAT	OR IS MISSI	IG. RETURN AIR IS S	EALED OF WITH			DPR-ACT = Damp	er Actuator
	SHEET M	ETAL; OA DA	MPERS ARE WIRED O	OPEN. UH'S ARE	E IN		RP-ACT = Replace	e Actuator
	GOOD CO	ONDITION.						
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:						· · · · · · · · · · · · · · · · · · ·		
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
INLET VANES	N/A: X	OK:	COMMENTS:				······	
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:		INEL BYOL		TOOMINE		11// \		
OOMMENTO.								
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	Пок:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP-ACT:	RP-BD:
PREHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REDEALLAN	11, 11, 11		1		1011,2121		RP-ACT = Replace	
	DX COIL I	FOR COOLIN	G					
	DX COIL I	FOR COOLIN	G				RP-BD = Replace	
	DX COIL I	FOR COOLIN	G					
COMMENTS: AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS: AHU PUMP MOTOR				SIZE:				
AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	OK:	REPLACE:					
AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	OK:	REPLACE:					
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X	OK:	REPLACE:	SIZE:	ED QUANTITY:			
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: X N/A: X	OK: OK:	REPLACE: REPLACE:	SIZE:	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

8390

FILE:

CHILLER / EQUIP. NO. REFG. EQUIP. TYPE: C-WCT = Centrifugal w/ Water Sid R-WCT = Reciprocating w/ Water Sid ACCU = Air Cooled Condensing U COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: CT/ACCU FAN MTR N/A:	ACCU-1 ACCU e Cooling Tower Side Cooling Tornit OK: X OK: OK: OK:	LOCATION (RM) MFG.: R-AC wer REPLACE: REPLACE: REPLACE: REPLACE:	HVAC UPGRADE OBSERVATIONS OUTSIDE - EAST SIDE MODEL: CU = Reciprocating w/ Air Cooled Condensing Unit WCT = Absorption w/ Water Side Cooling Tower Cooling Tower SIZE: SIZE: SIZE: SIZE: SIZE:	
C-WCT = Centrifugal w/ Water Sid R-WCT = Reciprocating w/ Water Sid ACCU = Air Cooled Condensing U COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: CT/ACCU FAN MTR N/A:	ACCU e Cooling Tower Side Cooling Tornit OK: X OK: OK: OK: OK:	MFG.: R-AC wer ASB- CT = REPLACE: REPLACE: REPLACE: REPLACE:	MODEL: CU = Reciprocating w/ Air Cooled Condensing Unit WCT = Absorption w/ Water Side Cooling Tower Cooling Tower SIZE: SIZE: SIZE:	
R-WCT = Reciprocating w/ Water State	e Cooling Tower Side Cooling Tornit OK: X OK: OK: OK: OK:	R-AC wer ASB- CT = REPLACE: REPLACE: REPLACE: REPLACE:	CU = Reciprocating w/ Air Cooled Condensing Unit WCT = Absorption w/ Water Side Cooling Tower Cooling Tower SIZE: SIZE: SIZE:	
ACCU = Air Cooled Condensing U COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: CT/ACCU FAN MTR N/A:	OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	WCT = Absorption w/ Water Side Cooling Tower Cooling Tower SIZE: SIZE: SIZE:	
R-WCT = Reciprocating w/ Water Staceur ACCU = Air Cooled Condensing U COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: CT/ACCU FAN MTR N/A: CT/ACCU FAN MTR N/A:	OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	Cooling Tower SIZE: SIZE: SIZE:	
COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: CT/ACCU FAN MTR N/A: CT/ACCU FAN MTR N/A:	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
COMP. MOTOR N/A: COMP. MOTOR N/A: COMP. MOTOR N/A: CT/ACCU FAN MTR N/A: CT/ACCU FAN MTR N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	
COMP. MOTOR N/A: COMP. MOTOR N/A: CT/ACCU FAN MTR N/A: CT/ACCU FAN MTR N/A:	OK: OK:	REPLACE:	SIZE:	
COMP. MOTOR N/A: CT/ACCU FAN MTR N/A: CT/ACCU FAN MTR N/A:	OK: X	REPLACE:		
CT/ACCU FAN MTR N/A: CT/ACCU FAN MTR N/A:	OK: X		SIZE:	
CT/ACCU FAN MTR N/A:				
*		REPLACE:	SIZE:	
CT/ACCU FAN MTR N/A:	OK:	REPLACE:	SIZE:	
	OK:	REPLACE:	SIZE:	
COMMENTS:				-
land the results	180	IDED! ACT	10.75	
COOLING TOWER N/A: X		REPLACE:	SIZE:	
AIR COOLED COND. N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:				
		1,11001110	TEOTIMATED OLIANTITY.	
CHILLER INSUL. N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL. N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHW PUMP MOTOR N/A: X	lok:	REPLACE:	SIZE:	
CHW PUMP SEALS N/A: X		REPLACE:	SIZE:	
CHW PUMP MOTOR N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS N/A:	OK:	REPLACE:	SIZE:	**
CHW PUMP MOTOR N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS N/A:	OK:	REPLACE:	SIZE:	•
COMMENTS:	1011.	1,12, 2,02,		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

8390

FILE:

	BOILE	R & CON	IVERTER - HVAC	UPGRADE OBSERVATIONS
BOILER/CONVERTER NO	D.	BLR-1	LOCATION (RM)	MER
BOILER TYPE:		HW	MFG.:	MODEL:
CONVERTER TYPE:			MFG.:	MODEL:
STM - Steam	1		ot Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water	:HTHW/H\	V - High Tem	p. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSP	HERIC:	POWER: X	OK: X REPLACE:
COMMENTS:				
BLR PUMP MOTOR	IINI/A. V	OK:	IDED! ACE.	IO17F
BLR PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:	IN/A: X	JUN:	REPLACE:	SIZE:
COMMENTS.				All Andreas An
	36			
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				

HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:	(NEW BE	ARINGS & SI	EALS 10-18-94)	
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	ISIZE:
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				L
CV INSULATION	N/A: X	OK:	MISSING:	[ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A: X	OK:	MISSING:	ESTIMATED QUANTITY:
COMMENTS:	INA. A	1011.	Jiviioolivo.	LOTHANED CONTITT.
JOIVIIVIEN 15:				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE:** 10/19/94

CLIENT CONTRACT NO: DACA 01-94-D-0033

PREPARED BY: JM.AJN/AMS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NAME: PHYS FITNESS CTR **BLDG NUMBER: 0202**

ELECTRIC METER: N

LOCATION: FT. RILEY, KS

GAS METER: N SUSPECT ACM: N CONDITIONED SQFT:

51,307

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:
PRES START:	0	0	0	0	0	0	0
PRES STOP:	24	24	24	24	24	24	24
REQ START:	9	6	6	6	6	6	9
REQ STOP:	21	22	22	22	22	22	21

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

DATE: 10/19/94

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

PREPARED BY: JM.AJN/AMS

AIRTIANDL	NAS CIAIT SURVET OBSERVATIONS		
BUILDING NUMBER: 0202	AULI OCATION, MEIOUT DOOM		
REFRIG SYS # SRVNG AHU: CT-1	SERVES AREA: WEIGHT ROOM		
	SERVES AREA: WEIGHT ROOM 14		
AHU NUMBER: AHU-1			
CFM-HTG:	4.500 CFM.CLG:		
MIN %OA:			
NAMEPLATE			
UNIT MFG:	LINIT MODEL		
SUPPLY FAN MTR MFG:			
SUPPLY FAN MTR MODEL:			
COMMENTS:	TO THE WITCHOOLE.		
COILS			
Coil Co	il Type Modulating Valve?		
PREHEAT COIL: NONE	П		
HUMIDIFIER: NONE			
COOLING COIL: DX	П		
SCHEDULE			
DAY SCHEDULE NO: 52	MONTH COUEDING NO		
SCHEDULE COMMENTS:	MONTH SCHEDULE NO: 2		
7120101. <u>Z1 ZZ</u>	22 22 22 21		
MONTHS JAN: FEB: MAR: AP	R: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:		
ONTROLS			
TYPE OF CONTROLS: EL	THE SINGLE SETPOINT		
	U		
PRESENT TEMP WINTR UNOCC:	U		
PRESENT TEMP SUM OCC			
	OTHER SETROINT DEG 5		
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LINES CO.		
	ECONOMISED DD CONTROL		
	TIME CLOCK. 14		
	TIME CLOCK OPERATIONAL? [N]		
OTHER CONTROLS DESCR:			
CONTROLS COMMENTS:			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/19/94
PREPARED BY: JM.AJN/AMS

BUILDING NUMBER: 0202 AHU NUMBER: AHU-2 AHU LOCATION: SKATE RINK REFRIG SYS # SRVNG AHU: CH-1 SERVES AREA: SKATE RINK % OF BLDG AREA HEATED: 0	
REFRIG SYS # SRVNG AHU: CH-1 SERVES AREA: SKATE RINK	
AHU UNIT TYPE SINGLE ZONE NUMBER OF ZONES IF MZ UNIT: 0	
CFM-HTG : 18,500 CFM-CLG : 18,500	
MIN %OA: 10 MAX %OA: 100	
NAMEPLATE	
UNIT MFG: CARRIER UNIT MODEL: 28CX1428	
SUPPLY FAN HP: 5 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG: RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL: COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: NONE	
HEATING COIL: STEAM	
REHEAT COIL: NONE	
COOLING COIL: DX	
SCHEDULE	
DAY SCHEDULE NO: 52 MONTH SCHEDULE NO: 3	
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0 0	
PRES STOP: 24 24 24 24 24 24 24 24 24 REQ START: 9 6 6 6 6 6 9	
REQ START: 9 6 6 6 6 9 REQ STOP: 21 22 22 22 22 22 21	
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT	
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0	
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 70 PRESENT TEMP WINTR UNOCC: 0 THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0	
TYPE OF CONTROLS: ELECTRIC PRESENT TEMP WINTR OCC: 70 PRESENT TEMP WINTR UNOCC: 0 THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0	
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 70 PRESENT TEMP WINTR UNOCC: 0 THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0	
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0 PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0	? N
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 70 PRESENT TEMP WINTR UNOCC: 0 PRESENT TEMP SUM OCC: 0 PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DESCRIP: 0	
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 70 PRESENT TEMP WINTR UNOCC: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0 PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0 PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0 MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS	: N
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT PRESENT TEMP WINTR OCC: 70 COLD DECK DEG F: 0 PRESENT TEMP WINTR UNOCC: 0 MIXED AIR DEG F: 0 PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP: 0 PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0 MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS MAX OA DMPR CONTROL: Y ECONOMIZER DB CONTROL: N TIME CLOCK	: N

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/19/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM.AJN/AMS

BUILDING NUMBER: 0202		
AHU NUMBER: UH-	1 AHU LOCATION	: GYMNASIUM
REFRIG SYS # SRVNG AHU: NO	ONE SERVES AREA:	GYM
	% OF BLDG AREA HEATED:	16
AHU UNIT TYPE UNIT HEATER	NU	MBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	8,000 CFM-CLG:	0
MIN %OA:	0 MAX %OA:	0
NAMEPLATE		
UNIT MFG:	LINI	T MODEL:
SUPPLY FAN HP:		FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN M	
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTF	R MODEL:
COMMENTS:		
COILS		
Coil	Coil Type Modulating \	/alve?
PREHEAT COIL: NONE		
HEATING COIL: STEAM	Λ	
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: NONE	LI	
SCHEDULE		
DAY SCHEDULE NO: 52		MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:		
SUN: MON:	TUE: WED: THUR: FRI: S	SAT:
PRES START: 0 0	0 0 0 0	0
PRES STOP: 24 24	24 24 24 24	24
REQ START: 9 6	$\frac{6}{2}$ $\frac{6}{2}$ $\frac{6}{2}$ $\frac{6}{2}$ $\frac{6}{2}$	9
REQ STOP: 21 22	222222	_ 21
	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON: 🗵 🗵 🖾		
CONTROLS		
TYPE OF CONTROLS:		OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	: 0	DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	. 0	DECK DEG F: 0 D AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPOIL	
PRESENT TEMP SUM UNOCC:	0 OTHER SETP	
MIN OA DMPR CONTROL: N	MIXED AIR DMPR CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL: N	ECONOMIZER DB CONTROL: N	TIME CLOCK:
RET AIR DMPR CONTROL: N	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: N		
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/19/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM.AJN/AMS

	, 1112 21110 OI111 O	OILLE ODOLIVATION	3110
BUILDING NUMBE	R: 0202		
AHU NUMBE	R: UH-2	AHU LOCATION: GYMNASIUM	
REFRIG SYS # SRVNG A	HU: NONE	SERVES AREA: GYM	
	% OF BLD	OG AREA HEATED:	16
AHU UNIT TYPE UNIT	HEATER	NUMBER OF ZONE	S IF MZ UNIT: 0
CFM-HTG:	8,000	CFM-CLG:	0
MIN %OA:		MAX %OA:	
NAMEPLATE			
UNIT MFG:		UNIT MODEL:	
SUPPLY FAN HP:	1.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:	CONTRACTOR AND AND AND AND AND AND AND AND AND AND
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE	—: <u> </u>	
HEATING COIL:	STEAM		
REHEAT COIL:	NONE	<u></u>	
HUMIDIFIER:	NONE		
COOLING COIL:	NONE		
SCHEDULE			
DAY SCHEDULE NO:	52	MONTH SCHE	DULE NO: 1
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: TI	HUR: FRI: SAT:	1
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 9	6 6 6	6 6 9	
REQ STOP: 21	22 22 22	22 22 21	
ON:	MAR: APR: MAY: JUN:		NOV: DEC:
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC		SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR UI	NOCC: 0	COLD DECK DEG F: MIXED AIR DEG F:	0
PRESENT TEMP SUN	MOCC: 0	OTHER SETPOINT DESCRIP:	0
PRESENT TEMP SUM UI		OTHER SETPOINT DESCRIP:	0
MIN OA DMPR CONTROL	.: N MIXED AIR DMPR	CONTROL: N IMPLEMENT DE	MAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL			TIME CLOCK: N
RET AIR DMPR CONTROL			LOCK OPERATIONAL? N
EXH AIR DMPR CONTROL		TIME C	TOUR OF EROCHOMALY
OTHER CONTROLS D	ESCR:		
CONTROLS COMM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/19/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM.AJN/AMS

EMC NO: 1406-001

AllVII	ANDLING	DIVITION	VEI OD	JEIVAH	0143	
BUILDING NUMBER	R: 0202					
AHU NUMBE	R: UH-3		AHU LOCATION	l: (4/4-
REFRIG SYS # SRVNG A	HU: NONE	s	ERVES AREA:	2ND FLR. OFF	ICES	
		% OF BLDG A	REA HEATED:			15
AHU UNIT TYPE UNIT	HEATER		NL	MBER OF ZON	ES IF MZ UI	NIT: 0
CFM-HTG:	5	750	CFM-CLG:	1	0	
MIN %OA:		0	MAX %OA:		0	
NAMEPLATE		·				
UNIT MFG:	:		UN	IT MODEL:		
SUPPLY FAN HP:		2	RET/EX	H FAN HP:		0
SUPPLY FAN MTR MFG:	:		RET/EXH FAN	MTR MFG:		
SUPPLY FAN MTR MODEL:		RE	T/EXH FAN MT	R MODEL:		
COMMENTS:						
COILS						
Coil	Coil Type		Modulating	Valve?		
PREHEAT COIL:	NONE		_ 🗆			
HEATING COIL:			_ 🗖			
REHEAT COIL:						
HUMIDIFIER:	NONE					
COOLING COIL:	NONE					
SCHEDULE						
DAY SCHEDULE NO:	52			MONTH SCH	EDULE NO:	
SCHEDULE COMMENTS:						
SUN:	MON: TUE:	WED: THUF	R: FRI:	SAT:		
PRES START: 0	0 0		00	0		
PRES STOP: 24	24 24		2424	24		
REQ START: 9	6 6		$\frac{6}{2} = \frac{6}{22} =$	9		
REQ STOP: 21	2222	222	22 22	21		
MONTHS JAN: FEB:	MAR: APR: N	MAY: JUN:	JUL: AUG:	SEP: OCT:	NOV:	DEC:
ON:					\boxtimes	\boxtimes
CONTROLS						
TYPE OF CON	TROLS: ELECTR	IC	THERM	OSTAT TYPE:	SINGLE S	ETPOINT
PRESENT TEMP WINT	R OCC:	0		DECK DEG F:	:	0
PRESENT TEMP WINTR		0		DECK DEG F: ED AIR DEG F:	;	<u>0</u> 0
PRESENT TEMP SU	M OCC:	0	OTHER SETPO	DINT DESCRIP:		
PRESENT TEMP SUM L	JNOCC:	0	OTHER SET	POINT DEG F:		0
MIN OA DMPR CONTRO	L: N MIXI	ED AIR DMPR C	ONTROL: N	IMPLEMENT	DEMAND LI	MIT CNTRLS?
MAX OA DMPR CONTRO	L: N ECO	NOMIZER DB C	ONTROL: N			TIME CLOCK:
RET AIR DMPR CONTRO	L: N ECO	NOMIZER WB C	ONTROL: N	TIME	CLOCK OF	PERATIONAL?
EXH AIR DMPR CONTRO	L: N					
OTHER CONTROLS CONTROLS COM	F-20					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001 **DATE:** 10/19/94

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

PREPARED BY: JM.AJN/AMS

		AHU LOCA	ATION: LOCKER	ROM	_
REFRIG SYS # SRVNG A	HU: NONE	 1			
	AHU NUMBER: UH-4 AHU LOCATION: LOCKER ROM FRIG SYS # SRVNG AHU: NONE SERVES AREA: LOCKER RM/ RAQUETBALL CO WOF BLDG AREA HEATED: 21 BU UNIT TYPE UNIT HEATER NUMBER OF ZONES IF MZ UNIT: 0 CFM-HTG: 8,000 MIN %OA: 0 MAX %OA: 0 EPLATE UNIT MFG: UNIT MODEL: SUPPLY FAN HP: 1.5 RET/EXH FAN HP: PPLY FAN MTR MFG: RET/EXH FAN MTR MFG: RET/EXH FAN MTR MODEL: COMMENTS: S COIL COIL Type Modulating Valve? PREHEAT COIL: NONE HEATING COIL: STEAM REHEAT COIL: NONE HUMIDIFIER: NONE COOLING COIL: NONE HUMIDIFIER: NONE COOLING COIL: NONE STEAM: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
AHU UNIT TYPE UNIT	HEATER		NUMBER OF Z	ONES IF MZ UNIT:	0
CFM-HTG:	8,000	CFM-C	CLG:	8,000	
MIN %OA:	0	MAX %	ooa:	0	
NAMEPLATE					
UNIT MFG:			UNIT MODEL:		
SUPPLY FAN HP:	1.5	 RE			
SUPPLY FAN MTR MFG:		RET/EXH	FAN MTR MFG:		
SUPPLY FAN MTR MODEL:		RET/EXH FA	N MTR MODEL:		
COMMENTS:	· · · · · · · · · · · · · · · · · · ·				
COILS					
Coil	Coil Type	Modula	ting Valve?		
PREHEAT COIL:	NONE				
		<u> </u>			
		H			
COOLING COIL:	NONE	· · · · · ·			
SCHEDULE					
DAY SCHEDULE NO:	52		MONTH SC	CHEDULE NO:	1
SCHEDULE COMMENTS:					Administration of the Control of the
SUN:	MON: TUE: WED	: THUR: FRI:	SAT:		_
		0 0 0	0		
			, ====		
· ====================================					
REQ STOP: 21	22 22 2	2 22 22	21		
	MAR: APR: MAY:	JUN: JUL: AU	G: SEP: OC	T: NOV: DEC:	_
ON:					
CONTROLS					_
TYPE OF CONT	ROLS: ELECTRIC	тн	ERMOSTAT TYPE	: SINGLE SETPOINT	
PRESENT TEMP WINTE	OCC:	0	HOT DECK DEG F		
PRESENT TEMP WINTR UI	NOCC:	0	OLD DECK DEG F		zi.
PRESENT TEMP SUN	l OCC·	 -	MIXED AIR DEG F TPOINT DESCRIP	·	=
PRESENT TEMP SUM UI			SETPOINT DEG F		<u> </u>
MIN OA DMPR CONTROL	: N MIXED AIR	DMPR CONTROL:	N IMPLEMEN	T DEMAND LIMIT CNT	RLS? N
MAX OA DMPR CONTROL		ER DB CONTROL:	N	TIME CL	
RET AIR DMPR CONTROL		ER WB CONTROL:	N TIM	E CLOCK OPERATIO	
EXH AIR DMPR CONTROL	: N	•			
OTHER CONTROLS D	ESCR:				
CONTROLS COMM	ENTS:				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

DATE: 10/19/94
PREPARED BY: JM.AJN/AMS

REFRIG SYS # SRVNG AHU: SERVES AREA: WOMEN'S LOCKERS 16 AHU UNIT TYPE UNIT HEATER NUMBER OF ZONES IF MZ UNIT: O CFM-HTG: MIN %OA: 0 MAX %OA: UNIT MODEL: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS: COILS		
### WOF BLDG AREA HEATED: 16 AHU UNIT TYPE UNIT HEATER NUMBER OF ZONES IF MZ UNIT: 0 CFM-HTG:		
MIN %OA: 0 MAX %OA: 0 NAMEPLATE UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS: UNIT MODEL: 0 RET/EXH FAN MTR MFG: RET/EXH FAN MTR MODEL: COMMENTS:		
NAMEPLATE UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:		
SUPPLY FAN HP: 1.5 RET/EXH FAN HP: 0 SUPPLY FAN MTR MFG: RET/EXH FAN MTR MFG: SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL: COMMENTS:		
COII 6		
OUILO		
PREHEAT COIL: NONE		
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:		
CONTROLS		
PRESENT TEMP WINTR OCC: O O O O O O O MIXED AIR DEG F: O O O O O O O O O O O O O		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/19/94

PREPARED BY: JM.AJN/AMS

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NU	MBER:	0202				BOILER	RM LOCA	ATION:	MER	
BOILER UN	IIT									
2011205.05	N DO UE	~	BLR/CO	VERTER	SERVES A	REA OR S	ERVICE:	ALL		
SOURCE OF E	SLDG HE	:AI ——								
● ⊠ BOILE	R					CONVER	<u>rer</u>			:
BOILER		BLR-1				ONVERTE	<u> </u>			
BOILER	TYPE:	LOW PRES	S STEAM (<	15#)	——: l	NVERTER	i-			<u> </u>
FUEL	TYPE:	NAT. GAS			CC	NV HT SC	OURCE:			
CENTRAL	PLANT	DIRECT								
NAMEPLAT	TE				% AREA	HEATED E	BY BB RAI	DIATION:		
BOILER MFG:	KEWANE	E			BLR	CAP OUT	PUT (BTU	H):		4,250,000
UNIT MODEL:	M 425-KG				BI	R CAP IN	PUT (BTU	H):		5,313,000
COMMENTS:										
COMMENTS.										
SCHEDULE	•									
DAYS SCHEDUL	E NO:	52					MONTH	SECHD	ULE NO:	1
SCHEDULE COMM								1020112		
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:			
PRES START:	0	0	0	0	0	0	0			
PRES STOP:	24	24	24	24	24	24	24			
REQ START:	9		6	6	6	6	9			
REQ STOP:	21	22	22	22	22	22	21			
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN: JUI	_: AUG	: SEP:	OCT:	NOV:	DEC:
ON:	\boxtimes	\boxtimes	\boxtimes					\boxtimes	\boxtimes	
CONTROLS	3									
TYPE OF	BLR CO	NTROLS:	ELECT	RIC			RESE	T CONTE	ROLS:	N
OPER/	ATING S	ETPOINT:		10 D	EG F or PS	G			_	
TYPE OF BUR	NER CO	NTROLS:								
CONTR	OLS CO	MMENTS:								

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/19/94
PREPARED BY: JM.AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUM	BFR.	0202			BLI	OG NAM	E: PHYS	SFITNES	SS CTR				
REF. UNIT N	UMBE	R/TAG:	CH-1						TION (ME	-	UTSIDE		
							- · · · · · · ·		J'S SER\	/ED: Al	HU-2		
		UNIT	TYPE AI	R COOLE	D CON	IDENSIN	G UNII, L	JX					
NAMEPL	ATE	Ε											
СНІ	LLER I	MFG:	CARRIER					TOWER	MFG:				
CHILL	ER MO	DEL:	38AE044S	10AA			# OF T	OWER F	ANS:			4	
CHILLER S	SERIAL	. NO:					T	OWER F	AN V:			208	
(CHILLE	RV:		- 1	208		TOWE	R FAN A	MPS:			4.6	
CHIL	LER A	MPS:			76		TO	WER FA	N HP:			0.43	
CI	HILLER	R PH:			3								
CHILLER C	AP (TC	NS):			45								
С	OMME	NTS:											
SCHEDL	JLE												
DAYS SCHEDI		DULE		52			MO	NTHS SC	CHEDULE	E NO:	2		
SCHED	JEE CC	JIVIIVIEN	13.										
	**	SUN:	MON:	TUE:			UR:	FRI:	SAT:				
PRES STA	=	0	0	0				0	0				
PRES ST	-	24	24	24		24 ==	24	24 =	24				
REQ STA	=	9 21	22	6		6 22		<u>6</u> _	<u>9</u> 21				
REQ ST	OP: _												
MONTHS .	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	_
——————————————————————————————————————					<u> </u>	\boxtimes	\boxtimes						
CONTRO	DLS												
T)//	DE 05	CONTR	016. [ECTRIC									
111	E UF	CONTR	OLS. EL	ECTRIC									
	CWS	S SETP	OINT:			0		WS SET		-		0	
	CWF	RSETP	OINT:			<u>O</u>	CI	IWR SET	POINT:	·		0	
	PR	ESS LI	тені: Г	V	TEN	IP LITE H	ii: N	ОТІ	HER INDI	CATIOR	S:		
		S LITE	==			LITE LOV						_	
	PRES	SS GAL	IGES:	1	TEMP	GAUGE	s: N	<u> </u>					
co	ONTRO	LS CO	MMENTS:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/19/94

PREPARED BY: JM.AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0202 BLD	OG NAME: PHYS FITNESS CTR
REF. UNIT NUMBER/TAG: CT-1	LOCATION (MER#): OUTSIDE
	AHU'S SERVED: AHU-1
UNIT TYPE WATER COOLING	TOWER
NAMEPLATE	
CHILLER MFG:	TOWER MFG: MARLEY
CHILLER MODEL:	# OF TOWER FANS: 1
CHILLER SERIAL NO:	TOWER FAN V: 0
CHILLER V: 0	TOWER FAN AMPS: 0
CHILLER AMPS: 0 CHILLER PH: 0	TOWER FAN HP:1
CHILLER CAP (TONS): 10	
COMMENTS:	
SCHEDULE	
DAYS SCHEDULE NO: 52	MONTHS SCHEDULE NO: 2
SCHEDULE COMMENTS:	
SUN: MON: TUE: WE	D: THUR: FRI: SAT:
PRES START: 0 0 0	
PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	$\frac{24}{6} \frac{24}{6} \frac{24}{6} \frac{24}{9}$
	$\frac{3}{22} = \frac{3}{22} = \frac{3}{21}$
MONTHS JAN: FEB: MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
on:	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	
CWS SETPOINT:	0 CNWS SETPOINT: 0 0 CNWR SETPOINT: 0
CWR SETPOINT:	
	PLITE HI: N OTHER INDICATIORS:
	ITE LOW: N GAUGES: N
CONTROLS COMMENTS:	
CW and CNW PUMPS	
PUMP TAG: 1 PUMP HP:	0.75 PUMP MFG:
PUMP SERVICE: COND WATER PUMP (CNW)	PUMP MODEL:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

202

FILE:

			BLDG:	20			FILE:	202.XLS	W	
		HANDLIN	IG UNIT - I	HVAC UP	GRADE (OBSERVA	TIONS			
AHU NO.:	FC-1,2	LOCATIO	ON (Rm)	GYM						
AHU TYPE:	FC	MFG.:				MODEL:				
SZ - Single Zone	H&V - He	ating & Vntltn	ıg.	FC - Fan C	oil (Indicate 2	2P for 2 Pipe or	4P for 4 Pi	oe)		
MZ - Mulitzone		iable Air Vol.		RHT - Rehe						
DD - Dual Duct	UH - Unit	Heater		IND - Induc	tion System					
O.A. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:		
R.A. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:		
E.A. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:		
F. & B. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:		
ZONE DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:		
COMMENTS:	TWO FC'S	S IN GYM &	ONE IN ATTIC	ABOVE RAQ	JET BALL C	OURTS.		DPR-ACT = Dam	per Actuator	
	220V/8.42	AMPS						RP-ACT = Replac	e Actuator	
FILTER SECTION	N/A: X	OK:	REPLACE:		SIZE:					
COMMENTS:	DUCT, 58	" X 16"								
SUPPLY AIR FAN	OK: X	REPLAC	E FAN BEARIN	GS:	COMMEN.	TS:				
SUPPLY FAN MOTOR	OK: X	REPLAC			ICOMMENTS:					
INLET VANES	N/A: X	IOK:	COMMENT	S:	TOOMINEN					
RETURN AIR FAN	OK:		REPLACE FAN BEARINGS:			TS:	N/A			
RETURN FAN MOTOR	OK:	REPLACI			COMMENTS:					
COMMENTS:	UNITS VE				COMMEN	13.				
OOIIIII.ETTO.	OIVITO VE	INTOLD.								
										
COOLING COIL	N/A: X	OK:	REPLACE:	***************************************	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
HEATING COIL	N/A:	OK: X	REPLACE:		SIZE:	CNTLVLV	NONE	RP- ACT:	RP-BD:	
PREHEAT COIL	N/A: X	OK:	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
REHEAT COIL	N/A: X	OK:	REPLACE:		SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:	
COMMENTS:	CONDITIO	N = VERY F	POOR					RP-ACT = Replac	e Actuator	
								RP-BD = Replace		
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:					
AHU PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:					
COMMENTS:		JOIN.	INLFLACE.		JUILE.					
OOIVIIVIEIV I 3.					*					
PIPE INSULATION	lini/a. ∨	Iov:	IMICOING		ICOTIL 4 TO	DOLLAR TEXT				
	N/A: X	OK:	MISSING:			D QUANTITY:				
DUCT INSULATION	N/A: X	OK:	MISSING:		JESTIMATE	D QUANTITY:				
COMMENTS:										

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

AHU NO.:	AHU-3	LOCATION	G UNIT - H	WEIGHT RO						
AHU TYPE:	SZ	MFG.:	COMFORT		, o	MODEL:		· · · · · · · · · · · · · · · · · · ·		
SZ - Single Zone		iting & Vntltng			il (Indicate 2F	for 2 Pipe or 4	P for 4 Pipe)		
MZ - Mulitzone	!	able Air Vol.	•	RHT - Rehea	•	7. T. 1. P. 1.				
DD - Dual Duct	UH - Unit F			IND - Inducti	•					
D.A. DAMPER	N/A: X	lok:	REPLACE:	<u></u>	ISIZE:	DPR-ACT	OK:	RP- ACT:		
R.A. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	ок:	RP- ACT:		
.A. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:		
F. & B. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	ОК:	RP- ACT:		
ZONE DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:		
COMMENTS:								DPR-ACT = Dampe	r Actuator	
								RP-ACT = Replace	Actuator	
FILTER SECTION	N/A:	OK: X	REPLACE:		SIZE:					
COMMENTS:		-								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARING	SS:	COMMENTS:					
SUPPLY FAN MOTOR	OK: X	REPLACE	:		COMMENTS:					
NLET VANES	N/A: X	OK:	COMMENT	S:						
RETURN AIR FAN	OK:	REPLACE	FAN BEARING	SS:	COMMENT	S:	N/A			
RETURN FAN MOTOR	ОК:	REPLACE	,		COMMENT	S:				
COMMENTS:										
COMMENTS:										
COMMENTS:										
	N/A:	OK: X	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:	
COOLING COIL-DX HEATING COIL	N/A:	OK: X	REPLACE:		SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL	N/A: N/A: X	OK: X	REPLACE:		SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE:		SIZE: SIZE: SIZE:	CNTLVLV	ОК:	RP- ACT:	RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE:	@ 3" FOR HE	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE:	@ 3" FOR HE	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE:	@ 3" FOR HE	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X OLD UNIT	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: (TION ON ~20'	@ 3" FOR HE	SIZE: SIZE: SIZE: EATING	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COMMENTS: COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: X N/A: X N/A: X OLD UNIT	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: ATION ON ~20'	@ 3" FOR HE	SIZE: SIZE: SIZE: EATING	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X OLD UNIT	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: (TION ON ~20'	@ 3" FOR HE	SIZE: SIZE: SIZE: EATING	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X OLD UNIT	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: ATION ON ~20'	@ 3" FOR HE	SIZE: SIZE: SIZE: EATING	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X OLD UNIT	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: ATION ON ~20'	@ 3" FOR HE	SIZE: SIZE: SIZE: EATING	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X OLD UNIT	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: TION ON ~20' REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: EATING	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X OLD UNIT	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	@ 3" FOR HE	SIZE: SIZE: SIZE: ATING SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV D QUANTITY:	OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
COOLING COIL-DX HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X OLD UNIT	OK: X OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: TION ON ~20' REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: ATING SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

202.XLS

AJN AJN

CHECKED BY: **202** File: 203

	REFRIGI	RATION	EQUIPME	NT - HVA	C UPGR	ADE OBS	ERVATIONS	
CHILLER / EQUIP. NO.		CH-1	LOCATION	(RM)	OUTSIDE,	WEST OF BL	DG.	
REFG. EQUIP. TYPE:		ACCU	MFG.:	CARRIER		MODEL:	38AE044510AA	
C-WCT = Centrifugal w/ \	Nater Side (Cooling Tower		R-ACCU = I	Reciprocating	g w/ Air Cooled	d Condensing Unit	
R-WCT = Reciprocating v			er	ASB-WCT =	Absorption	w/ Water Side	Cooling Tower	
ACCU = Air Cooled Cond	lensing Unit			CT = Coolin	g Tower			
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:			
COMMENTS:	TYPICAL	OF 4 FANS						
COOLING TOWER	N/A:	OK:	REPLACE:		SIZE:			
AIR COOLED COND.	N/A:	OK:	REPLACE:	Χ	SIZE:			
COMMENTS:	DAMAGE	O, SEE PHOTO	DS .					
CHILLER INSUL.	N/A:	OK: X	MISSING:			D QUANTITY		
CHW PIPE INSUL.	N/A: X	OK:	MISSING:		ESTIMATE	D QUANTITY		

CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A: X	ОК:	REPLACE:		SIZE:			
COMMENTS:					, ,			

						w		
						*********	***	

-								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

202

FILE:

202.XLS

F	REFRIGE	RATION I	EQUIPMEN	NT - HVAC	UPGRA	ADE OBSERVATIONS
CHILLER / EQUIP. NO.		CT-1	LOCATION	(RM)	OUTSIDE	
REFG. EQUIP. TYPE:		CT	MFG.:	MARLEY AQU	ATOWER	SERIAL: 4615 750
C-WCT = Centrifugal w/ W	ater Side Co	oling Tower		R-ACCU = Re	ciprocating	w/ Air Cooled Condensing Unit
R-WCT = Reciprocating w	/ Water Side	Cooling Towe	er	1	•	w/ Water Side Cooling Tower
ACCU = Air Cooled Conde	ensing Unit			CT = Cooling	Tower	
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:	1 HP
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:	
COMMENTS:	THIS UNIT	GOES WITH	THE COMFO	RT AIR UNIT I	THE WEI	GHT ROOM
COOLING TOWER	N/A:	JOK:	REPLACE:	χ 1	SIZE:	
AIR COOLED COND.	N/A:	OK:	REPLACE:		SIZE:	
COMMENTS:	<u> </u>	KED W/SCAL			<u> </u>	
COMMENTO.	OUNE OA	NED WOOKE	-			
CHILLER INSUL.	N/A: X	OK:	MISSING:		FSTIMATE	D QUANTITY:
CHW PIPE INSUL.	N/A: X	IOK:	MISSING:			D QUANTITY:
COMMENTS:			- Innocirto:			
COMMENTS.	···					
CNW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:	MOTOR IS OLD, 3/4 HP
CHW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:	The state of the s
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:	
COMMENTS:						

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

BLDG:

202

FILE: 202.XLS

	BOILE	R & CON	VERTER - HV	AC UPGRAD	E OBSERVA	TIONS	
BOILER/CONVERTER NO).	BLR-1	LOCATION (RM) MER			
BOILER TYPE:		STM	MFG.: KE	WANEE	MODEL: N	1 -425-KG	
CONVERTER TYPE:			MFG.:		MODEL:		
STM - Steam	STM/HW -	Steam to Ho	t Water Conv.		「M - High Temp H		onvertor
HW - Hot Water	HTHW/HV	V - High Tem	o. HW to HW Cv.	DHW - De	omestic Hot Water		
BOILER BURNER	ATMOSPH	HERIC:	POWER: X	OK:	ĮF	REPLACE:	
COMMENTS:							
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SłZE:			
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:							
		1616		Tearner	ED OLIVETER		
BLR INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY:		101001 041041
PIPE INSULATION	N/A:	OK:	MISSING: X	JESTIMA	ED QUANTITY:		12' @ 8" + 24' @ 4"
COMMENTS:							
		Tou	Jeen Los	louze			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE: SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:				
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE: SIZE:			
HW PUMP SEALS	N/A: X	OK:	REPLACE:	Joize.			
COMMENTS:							
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:		101/.	11.2. 2.02.	T			
COMINEM 13.				Julius III			
	N/A: X	OK:	MISSING:	[ESTIMA	TED QUANTITY:		
CV INSULATION		1				·····	
CV INSULATION CV PIPE INSUL.	N/A: X	OK:	MISSING:	(ESTIMA	TED QUANTITY:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW/AMS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NAME: BOWLING ALLEY **BLDG NUMBER: 7485**

ELECTRIC METER: Y GAS METER: Y

SUSPECT ACM: N

CONDITIONED SQFT:

36,966

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 53

THUR: FRI: SUN: MON: TUE: WED: SAT: PRES START: 0 0 0 0 0 0 0 24 24 PRES STOP: 24 24 24 24 24 9 12 9 9 9 9 9 **REQ START:** 2 REQ STOP: 22 24 24 24 24

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/11/94

LOCATION: FT. RILEY, KS PREPARED BY: AJN/CWW/AMS

BUILDING NUMBE							
ALULAUIMOT	R: 7485						
AHU NUMBE	R: AHU-1		AHU LOCATIO	N: ORIG. BLD	G MER		
REFRIG SYS # SRVNG A	HU: CH-2	-	SERVES AREA	: ORIG. BLDG.			
		% OF BL	DG AREA HEATED			46	
AHU UNIT TYPE DUAL	. DUCT		N	UMBER OF ZON	NES IF MZ	UNIT: 0	
CFM-HTG:		16,000	CFM-CLG		16,000		
MIN %OA:		20	MAX %OA		100		
NAMEPLATE							
UNIT MFG:	WORTHING	STON CORP	UI	NIT MODEL: CI	VI-40.00		
SUPPLY FAN HP:		2		KH FAN HP:	11 10.00	0	
SUPPLY FAN MTR MFG:		:	RET/EXH FAN	I MTR MFG:			
SUPPLY FAN MTR MODEL:			RET/EXH FAN M	TR MODEL:			
COMMENTS:						· · · · · · · · · · · · · · · · · · ·	
COILS							
Coil	Coil	Туре	Modulating	y Valve?			
PREHEAT COIL:	NONE						
HEATING COIL:	HOT WATE	:R	🖂				
REHEAT COIL:	NONE						
HUMIDIFIER:	NONE						
COOLING COIL:	DX						
SCHEDULE							
DAY SCHEDULE NO:	53			MONTH SCH	FDULE NO		
SCHEDULE COMMENTS:							
CONEDUCE COMMENTS.):3	
SUN:	MON: T	UE: WED:	THUR: FRI:	SAT:			
		UE: WED: 0	THUR: FRI:	SAT:		3	
SUN:	MON: T 0 24						
SUN: PRES START: 0 PRES STOP: 24 REQ START: 12	0	0 0	0 0	<u>0</u> 24			
SUN: PRES START: 0 PRES STOP: 24	0 24	0 0 24 24	0 0 24 24	0	· ·		
SUN: PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB:	0 24 9	0 0 24 24 9 9 24 24	0 0 24 24 9 9 24 2	0 24 9		DEC:	
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22	0 24 9 24	0 0 24 24 9 9 24 24	0 0 24 24 9 9 24 2	0 24 9 2 SEP: OCT:	NOV:	DEC:	
SUN: PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON:	0 24 9 24 MAR: APR	0 0 24 24 9 9 24 24 22 24 22 24 22 24 24 24 24 24 24	0 0 24 24 9 9 24 2	0 24 9 2			
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON:	0 24 9 24 MAR: APR	0 0 24 24 9 9 24 24 22 24 22 24 22 24 24 24 24 24 24	0 0 24 24 9 9 24 2 N: JUL: AUG: ⊠ ⊠	0 24 9 2 SEP: OCT:	NOV:	DEC:	
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: CONTROLS	0 24 9 24 MAR: APR ⊠ ⊠	0 0 24 24 9 9 24 24 E: MAY: JUN	0 0 24 24 9 9 24 2 N: JUL: AUG: ⊠ ⊠	0 24 9 2 SEP: OCT: ⊠ ⊠	NOV:	DEC:	
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT	0 24 9 24 MAR: APR ⊠ ⊠	0 0 24 24 9 9 24 24 24 24 24 24 24 24 24 24 24 24 24	0 0 24 24 9 9 24 2 N: JUL: AUG: ☑ ☑ THERM HOT COLE	SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F:	NOV:	DEC:	
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE U	MAR: APR TROLS: PNE R OCC: NOCC:	0 0 24 24 9 9 24 24 E: MAY: JUN 🖂 🖂	0 0 24 24 9 9 24 2 N: JUL: AUG:	SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F:	NOV:	DEC: SETPOINT 0	
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE	MAR: APR	0 0 24 24 9 9 24 24 24 24 24 24 24 24 24 24 24 24 24	O O O O O O O O O O O O O O O O O O O	SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F:	NOV:	DEC: SETPOINT 0 0	
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM U PRESENT TEMP SUM U	MAR: APR MAR: PNE ROCC: NOCC: NOCC:	0 0 24 24 9 9 24 24 24 24 24 24 24 24 24 24 24 24 24	O O O O O O O O O O O O O O O O O O O	SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DEG F:	NOV: SINGLE S	DEC: SETPOINT 0 0 0	
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL	MAR: APR TROLS: PNE ROCC: NOCC: NOCC: NOCC:	0 0 24 9 9 24 24 24 24 24 24 24 24 24 24 24 24 24	O O O O O O O O O O O O O O O O O O O	SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DEG F:	NOV: SINGLE S	DEC: SETPOINT 0 0 0 0	
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL	MAR: APR BOCC: NOCC: NOCC: NOCC: NOCC: NOCC: NOCC: NOCC:	0 0 24 24 9 9 24 24 24 24 24 24 24 24 24 24 24 24 24	O O O O O O O O O O O O O O O O O O O	SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DEG F:	NOV: SINGLE S DEMAND L	DEC: SETPOINT 0 0 0 IMIT CNTRLS TIME CLOCK	: <u>N</u>
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL	0 24 9 24	0 0 24 9 9 24 24 24 24 24 24 24 24 24 24 24 24 24	O O O O O O O O O O O O O O O O O O O	SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DEG F:	NOV: SINGLE S DEMAND L	DEC: SETPOINT 0 0 0 0	: <u>N</u>
PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL	0 24 9 24	0 0 24 24 9 9 24 24 24 24 24 24 24 24 24 24 24 24 24	O O O O O O O O O O O O O O O O O O O	SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DINT DESCRIP: POINT DEG F:	NOV: SINGLE S DEMAND L	DEC: SETPOINT 0 0 0 IMIT CNTRLS TIME CLOCK	: <u>N</u>

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW/AMS

BUILDING NUMBER: 7485 AHU NUMBER: AHU-2 AHU LOCATION: MER	
REFRIG SYS # SRVNG AHU: CH-2 SERVES AREA: NEW ADDITION	
% OF BLDG AREA HEATED: 46	
AHU UNIT TYPE VAV NUMBER OF ZONES IF MZ UNIT: 0	
CFM-HTG: 10,000 CFM-CLG: 10,000	
MIN %OA: 10 MAX %OA: 100	
NAMEPLATE	
UNIT MFG: CARRIER UNIT MODEL: 34ED23	
SUPPLY FAN HP: 10 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG: RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL: COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	_
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	
REHEAT COIL: HOT WATER	
HUMIDIFIER: NONE	
COOLING COIL: DX	
SCHEDULE	_
DAY SCHEDULE NO: 53 MONTH SCHEDULE NO: 3	
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED: THUR: FRI: SAT:	
PRES START: 0 0 0 0 0 0 0	
PRES STOP: 24 24 24 24 24 24 24	
REQ START: 12 9 9 9 9 9 9	
REQ STOP: 22 24 24 24 2 2 2	
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
CONTROLS	_
TYPE OF CONTROLS: PNEUMATIC THERMOSTAT TYPE: SINGLE SETPOINT	-
PRESENT TEMP WINTR OCC: 70 HOT DECK DEG F: 0	
PRESENT TEMP WINTR UNOCC: 70 MIXED AIR DEG F: 0	
PRESENT TEMP SUM OCC: 70 OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM UNOCC: 70 OTHER SETPOINT DEG F: 0	
MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: Y IMPLEMENT DEMAND LIMIT CNTRLS?	N
MAX OA DMPR CONTROL: Y ECONOMIZER DB CONTROL: Y TIME CLOCK:	Y
RET AIR DMPR CONTROL: Y ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL?	N
EXH AIR DMPR CONTROL: N	
OTHER CONTROLS DESCR:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/11/94

LOCATION: FT. RILEY, KS PREPARED BY: AJN/CWW/AMS

. AHU NUMBEI			STORAGE/ MAINTENANCE
REFRIG SYS # SRVNG A		SERVES AREA: OF DF BLDG AREA HEATED:	RIG. BLDG
AHU UNIT TYPE UNIT	HEATER	NUMB	ER OF ZONES IF MZ UNIT: 0
CFM-HTG: MIN %OA:	2,200 0	CFM-CLG: MAX %OA:	0 100
NAMEPLATE			
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:	0.25	UNIT M RET/EXH FA RET/EXH FAN MTR RET/EXH FAN MTR M	AN HP: 0 R MFG:
Coil	Coil Type	Modulating Valv	ve?
PREHEAT COIL: HEATING COIL: REHEAT COIL: HUMIDIFIER: COOLING COIL:	NONE HOT WATER NONE NONE		
JOHEDOLL			
DAY SCHEDULE NO: SCHEDULE COMMENTS:	53	М	ONTH SCHEDULE NO: 1
DAY SCHEDULE NO:	MON: TUE: WE 0 0 24 24 24 9 9	D: THUR: FRI: SAT 0 0 0 0 24 24 24 24 24 9 9 9 9	:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON:	MON: TUE: WE 0 0 24 24 24 9 9	D: THUR: FRI: SAT 0 0 0 0 24 24 24 24 24 9 9 9 9	÷ 0 4 9 2
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON:	MON: TUE: WE 0 0 24 24 24 9 9 24 24 24 MAR: APR: MAY:	D: THUR: FRI: SAT 0 0 0 0 24 24 24 24 9 9 9 9 24 24 2 2 JUN: JUL: AUG: SE	P: OCT: NOV: DEC:
DAY SCHEDULE NO: SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 12 REQ STOP: 22 MONTHS JAN: FEB: ON:	MON: TUE: WE 0 0 24 24 9 9 24 24 MAR: APR: MAY: □ □ ROLS: ELECTRIC ROCC: NOCC:	D: THUR: FRI: SAT 0 0 0 0 24 24 24 24 9 9 9 9 24 24 2 2 JUN: JUL: AUG: SE THERMOST HOT DEC COLD DEC MIXED A 0 OTHER SETPOINT 0 OTHER SETPOIN	P: OCT: NOV: DEC: X X SINGLE SETPOINT CK DEG F: 0 CK DEG F: 0 DESCRIP: 0 DESCRIP: 0 DESCRIP: 0 DESCRIP: 0 CK DEG F: 0 C

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW/AMS

AIR HANDLING LINIT SURVEY ORSERVATIONS

7 MATTIANDENTO O	MIT SURVET ODSERVATIONS
BUILDING NUMBER: 7485	
AHU NUMBER: UH-2	AHU LOCATION: STORAGE/ MAINTENANCE
REFRIG SYS # SRVNG AHU: NONE	SERVES AREA: NEW ADDITION
•	% OF BLDG AREA HEATED: 4
AHU UNIT TYPE UNIT HEATER	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG : 1,630	0 CFM-CLG: 0
	0 MAX %OA: 100
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP: 0.25	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	Taxa da Taxa d
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	
SCHEDULE	
DAY SCHEDULE NO: 53	MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:	
SUN: MON: TUE: V	VED: THUR: FRI: SAT:
PRES START: 0 0 0	0 0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START : 12 9 9	9 9 9
REQ STOP: 22 24 24	24 24 2 2
MONTHS JAN: FEB: MAR: APR: MAY	: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖾 🖾 🖂 🗖	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	0 HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXED A	AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
	MIZER DB CONTROL: N TIME CLOCK: N
	MIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL: [N]	
OTHER CONTROLS DESCR: CONTROLS COMMENTS:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/11/94 **PREPARED BY:** AJN/CWW/AMS

LOCATION: FT. RILEY, KS

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILD	ING NU	MBER:	7485	BOILER RM LOCATION: MER									
BOILE	R UN	IIT											
SOUR	CE OF	BLDG HE	AT ——	BLR/CO	NVERT	ER SEF	RVES AR	EA OR S	ERVICE:	AHU-1	,2		
	BOILER	R TAG: TYPE:	BLR-1 HW (UP TO NAT. GAS	250 DEG)			CONVERTER CONVERTER TAG: CONVERTER TYPE: CONV HT SOURCE:						
CE	NTRAL	PLANT [DIRECT									•	
NAMER	PLAT	Έ	-			% /	AREA HE	ATED B	Y BB RAI	DIATION	:		0
BOILER MOI UNIT MOI COMMEI	DEL: V	VGFD-200	00						PUT (BTU PUT (BTU			1,600,000	
DAYS SO		=	53					411.41	MONT	I SECHE	OULE NO		1
PRES S PRES S REQ S REQ S	STOP:	SUN: 0 24 12 22	MON: 0 24 9 24	TUE: 0 24 9 24		D: TH 0 24 9	HUR: 0 24 9 24	FRI: 0 24 9	SAT: 0 24 9 2				
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
TYPE C	PE OF I	BLR CON TING SE NER CON DLS COM	TPOINT: TROLS:	PNEUM		DEG F	or PSIG		RESE	CONTE	ROLS: [N	
W PU!	MP												
PUMP PUMP SER		1 HW PUM	P	PUMF	HP:				UMP MF		RATHON 182TTD	R7627ACL	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE:** 10/11/94

PREPARED BY: AJN/CWW/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 748	5 BLDG I	NAME: BOWLING ALLEY	
REF. UNIT NUMBER/TAC	G: CH-2	LOCATION (MER#):	OUTSIDE
(LI . OIII I IIII III		AHU'S SERVED:	
UNI	T TYPE RECIPROCATING WIT	TH AIR COOLED CONDENSING UNIT	
NAMEPLATE			
CHILLER MFG:	CARRIER	TOWER MFG:	
CHILLER MODEL:	38AD-028-530	# OF TOWER FANS:	3
CHILLER SERIAL NO:		TOWER FAN V:	0
CHILLER V:	<u> </u>	TOWER FAN AMPS:	
CHILLER AMPS:	0	TOWER FAN HP:	0.5
CHILLER PH:	0		
CHILLER CAP (TONS):	28		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE SCHEDULE COMME	ENTS:	MONTHS SCHEDULE NO:	2
SUN		THUR: FRI: SAT:	
	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$	
	$\frac{24}{2} = \frac{24}{9} = \frac{24}{9} = \frac{24}{9}$	9 9 9	
	22 24 24 24	24 2 2	
MONTHS JAN: FEB	: MAR: APR: MAY: J	UN: JUL: AUG: SEP: OC	r: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: ELECTRIC		
CWS SET	POINT: 0	CNWS SETPOINT:	0
CWR SET		· · · · · · · · · · · · · · · · · · ·	0
PRESS L	.ITE HI: N TEMP LI	TE HI: N OTHER INDICATION	ORS:
PRESS LITE			
PRESS GA			
CONTROLS CO	DMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 74	85	В	LDG NAME:	BOWLING	ALLEY			
REF. UNIT NUMBER/TA	AG: CH-1			LOC	ATION (M	IER#): (OUTSIDE	
				A	HU'S SEF	RVED: 1	AHU-1	
U	IIT TYPE	RECIPROCATING	3 WITH AIR C	COOLED CO	NDENSIN	G UNIT]	
NAMEPLATE								
CHILLER MFG	: TSI			TOWE	R MFG:			
CHILLER MODEL	: 502CD6	0		OF TOWER	R FANS:			6
CHILLER SERIAL NO	: 9692			TOWER	FAN V:			0
CHILLER V	-	230	7	OWER FAN	AMPS:			4.6
CHILLER AMPS		250		TOWER F	AN HP:			1
CHILLER PH		3						
CHILLER CAP (TONS)		60						
COMMENTS	:							
SCHEDULE								
DAYS SCHEDUL	E NO:	53		MONTHS :	SCHEDUL	E NO:	2	
SCHEDULE COMM	ENTS:				JOHEDOE	L NO.		
SU	N: MON	l: TUE: WI	ED: THUR:	FRI:	SAT:			
PRES START:	0	0 0	0 0	0	0			
	24 2	4 24	24 24	24	24			
		99	9 9	9	9			
REQ STOP:	22 2	4 24	24 24	2	2			
MONTHS JAN: FEE	: MAR:	APR: MAY:	JUN: JI	JL: AUG:	SEP:	OCT:	NOV:	DEC:
ON:					\boxtimes			П
CONTROLS								
TYPE OF CONT	DOLO	I FOTOIG						
TYPE OF CONT	KULS: E	LECTRIC						
CWS SET	=		0	CNWS SE	TPOINT:			0
CWR SET	POINT:		0	CNWR SE	TPOINT:			0
PRESS I	.ITE HI: [N TEM	PLITEHI: [N OT	HER INDI	CATIORS	S:	
PRESS LIT		N TEMP L	.ITE LOW: [N				
PRESS GA	UGES:	N TEMP	GAUGES: [N				_
CONTROLS CO	OMMENTS:							

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

LOCATION: FT. RILEY, KANSAS					CHECKED BY:		AJ	
			BLDG:	7485		FILE:	7485.XLS	
	AIR	HANDLIN	G UNIT - HVAC	UPGRADE	OBSERVA	TIONS		-
AHU NO.:	AHU-1	LOCATIO		MER				
NHU TYPE:	VAV	MFG.:	CARRIER		MODEL:	28CU112	MB4084-K	
SZ - Single Zone	H&V - He	eating & Vntltne	g. FC -	Fan Coil (Indicate	2P for 2 Pipe or			
/IZ - Mulitzone	VAV - Va	riable Air Vol.		- Reheat System	•	•	,	
DD - Dual Duct	UH - Unit	Heater		- Induction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	VAV CON	ITROLLER IS	SET TO MANUAL OF	PERATION			DPR-ACT = Damp	or Ashiptor
							RP-ACT = Replace	
ILTER SECTION	N/A:	Ок: х	REPLACE:	SIZE:				
COMMENTS:		JON. X	INLFLACE.	JOIZE.				
OWINEINTS.								-
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE			COMMENTS: N/A			
COMMENTS:			·			11// 1	· · · · · · · · · · · · · · · · · · ·	
							· · · · · · · · · · · · · · · · · · ·	
OOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
EATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
EHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
OMMENTS:							RP-ACT = Replace	Actuator
							RP-BD = Replace B	lody
								
HU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:						 		
IPE INSULATION	N/A:	OK: X	MISSING:	IESTIMATE	D QUANTITY			
PIPE INSULATION DUCT INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY: ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE: 7485.XLS

	AIR F	IANDLIN	G UNIT - H	VAC U	PGRADE	OBSERVA [*]	TIONS		
HU NO.:	AHU-2	LOCATIO	N (Rm)	MER WE	ST				
HU TYPE:	DUAL DUC	T MFG.:				MODEL:			
Z - Single Zone	H&V - Hea	ting & Vntltno	g.			2P for 2 Pipe or	4P for 4 Pi	pe)	
IZ - Mulitzone	VAV - Vari	able Air Vol.			heat System				
D - Dual Duct	UH - Unit H	Heater		IND - Ind	uction System				
A. DAMPER	N/A:	OK: X	CLEAN		SIZE:	DPR-ACT	OK:	RP- ACT:	
.A. DAMPER	N/A:	OK: X	CLEAN		SIZE:	DPR-ACT	OK:	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:		SIZE:	DPR-ACT	ок:	RP- ACT:	
OMMENTS:			ry, need to e		ed. Unit			DPR-ACT = Dampe	er Actuator
	CHANGE	OVER SWITC	CH STILL @ SU	MMER.				RP-ACT = Replace	Actuator
ILTER SECTION	N/A:	OK: X	REPLACE:		SIZE:				
COMMENTS:									
SUPPLY AIR FAN	OK: X	IREPLACE	E FAN BEARIN	GS:	COMME	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE			COMME	NTS:			
NLET VANES	N/A: X	OK:	COMMENT	S:					
RETURN AIR FAN	OK:		E FAN BEARIN		COMME	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACI			COMME		N/A		
COMMENTS:		1.12.2.10.							
OOMMENTO.									
					love	IONES VIN	الماد	IDD ACT.	Inn nn
COOLING COIL	N/A:	OK: X	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:X
PREHEAT COIL	N/A:	OK:	REPLACE:		SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A:	OK:	REPLACE:		SIZE:	CNTEVEV	OK:		
COMMENTS:								RP-ACT = Replace	
								RP-BD = Replace	Body
			-						
AHU PUMP MOTOR	N/A:	OK:	REPLACE		SIZE:				
AHU PUMP SEALS	N/A:	OK:	REPLACE		SIZE:				
COMMENTS:									
PIPE INSULATION	N/A:	OK:	MISSING:	Х		TED QUANTITY		20' @ 3"	
DUCT INSULATION	N/A: X	OK:	MISSING:		ESTIMA	TED QUANTITY	:		
COMMENTS:									

7485

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY: 7485.XLS

CHILLER / EQUIP. NO. REFG. EQUIP. TYPE: C-WCT = Centrifugal w/ Wate R-WCT = Reciprocating w/ W ACCU = Air Cooled Condens COMP. MOTOR	Fer Side Cooling ater Side Coo	H-1 R-ACCU	BLDG: QUIPMEN LOCATION MFG.:			ADE OBSI	FILE: ERVATI	7485.3	\LS	
CHILLER / EQUIP. NO. REFG. EQUIP. TYPE: C-WCT = Centrifugal w/ Wate R-WCT = Reciprocating w/ WACCU = Air Cooled Condens COMP. MOTOR	C F er Side Cooling ater Side Coo	H-1 R-ACCU	LOCATION			ADE ORS	ERVAII	ONS		
REFG. EQUIP. TYPE: C-WCT = Centrifugal w/ Wate R-WCT = Reciprocating w/ W CCU = Air Cooled Condens COMP. MOTOR	Fer Side Cooling ater Side Coo	R-ACCU		(RM)	OUTSIDE I			0110		
C-WCT = Centrifugal w/ Wate R-WCT = Reciprocating w/ W ACCU = Air Cooled Condens COMP. MOTOR	er Side Cooling ater Side Coo		IMFG.:		0010.02					
R-WCT = Reciprocating w/ WACCU = Air Cooled Condens COMP. MOTOR	ater Side Coo	g Tower		CARRIER		MODEL:	38AD-02			
ACCU = Air Cooled Condens COMP. MOTOR				1		w/ Air Cooled		-		
COMP. MOTOR	· 1 1 - · 4	ling Tower		[•	w/ Water Side	Cooling T	ower		
				CT = Cooling			*			
		K: X	REPLACE:		SIZE:					
		K:	REPLACE:		SIZE:					
· · ·		K:	REPLACE:		SIZE:					
COMP. MOTOR		K:	REPLACE:		SIZE:					
CT/ACCU FAN MTR		K: X	REPLACE:		SIZE:	208V @ 6A	١			
		K: X	REPLACE:		SIZE:	1 HP				
CT/ACCU FAN MTR	V/A: C	K: X	REPLACE:		SIZE:	1 HP				
COMMENTS:										
COOLING TOWER	V/A:	K:	REPLACE:		SIZE:					
AIR COOLED COND.	V/A:	K:	REPLACE:		SIZE:			******		
COMMENTS:										
JOHNE TTO.										
CHILLER INSUL.	N/A: IC	OK:	MISSING:		TESTIMATE	D QUANTITY	·.			
		K:	MISSING:			D QUANTITY			···	
COMMENTS:	VI/A. C		INIOCATO.		1201111111111	GO/WITH	·			
COMMENTS.										
CHW PUMP MOTOR	N/A: C	DK:	REPLACE:		SIZE:					
		OK:	REPLACE:		SIZE:					
		OK:	REPLACE:		SIZE:				··	w.
11		OK:	REPLACE:		SIZE:					
					<u></u>					
1.		OK:	REPLACE:		SIZE:					
		OK:	REPLACE:							
		OK:	REPLACE:		SIZE:					
CHW PUMP SEALS	Ñ/A: C	K:	REPLACE:		SIZE:	w				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7485

FILE:

7485.XLS

	REFRIGE	RATION E	QUIPME	NT - HVA	UPGRADE OB	SERVATIONS
CHILLER / EQUIP. NO.		CH-2	LOCATION	(RM)	SOUTH OF BLDG.	
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	TSI	MODEL:	502CD60
C-WCT = Centrifugal w/	Water Side C	Cooling Tower	*	R-ACCU = R	eciprocating w/ Air Cool	ed Condensing Unit
R-WCT = Reciprocating			er	ASB-WCT =	Absorption w/ Water Sid	le Cooling Tower
ACCU = Air Cooled Cond	densing Unit			CT = Cooling	Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:	
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:	
COMMENTS:	TYPICAL	OF 6 CONDEN	SER FANS			
COOLING TOWER	N/A:	OK:	REPLACE:		SIZE:	
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:	
COMMENTS:						
CHILLER INSUL.	N/A:	TOK: X	MISSING:		ESTIMATED QUANTIT	y ·
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	···	ESTIMATED QUANTIT	
	<u></u>	1011. 7	piniodino.		LOTHWINTED GOMMIN	1.
COMMENTS:						
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:	
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:	· · · · · · · · · · · · · · · · · · ·
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:	
CHW PUMP SEALS	N/A:	OK:	REPLACE:	***************************************	SIZE:	**************************************
COMMENTS:						
:						
			,			
			· · · · · · · · · · · · · · · · · · ·			
			·	· .		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG:

7485

FILE: 7485.XLS

BOILER/CONVERTER NO. BOILER TYPE: HW MFG: AJAX MODEL: WFD-2000 BOILER TYPE: HW MFG: MAJAX MODEL: WFD-2000 CONVERTER TYPE: MFG: MODEL: STMSteam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Converto HW - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER JATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BLR PUMP MOTOR NIA: OK: X REPLACE: SIZE: COMMENTS: PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BLR INSULATION NIA: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION NIA: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP SEALS NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NIA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: COMMENTS:
SOLONVERTER TYPE: MFG: MFG: MODEL: STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BLR PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP BLR PUMP MOTOR BLR PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: HW PUMP SEALS N/A: X OK: REPLACE: HW PUMP SEALS N/A: X OK: REPLACE: HW PUMP MOTOR N/A: X OK: REPLACE: HW PUMP MOTOR N/A: X OK: REPLACE: HW PUMP SEALS N/A: X OK: REPLACE: HW PUMP SEALS N/A: X OK: REPLACE: HW PUMP SEALS N/A: X OK: REPLACE: HW PUMP SEALS N/A: X OK: REPLACE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE:
STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor
HV - Hot Water HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: BUR PUMP MOTOR IN/A: OK: X REPLACE: SIZE: 3 HP BUR PUMP SEALS IN/A: OK: X REPLACE: SIZE: COMMENTS: PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BUR INSULATION IN/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION IN/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP SEALS IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: HW PUMP MOTOR IN/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR IN/A: X OK: REPLACE: SIZE: COMMENTS:
ATMOSPHERIC: POWER: X OK: X REPLACE:
BLR PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: SV PUMP MOTOR N/A: X OK: REPLACE: SIZE:
BLR PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3 HP BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: ESTIMATED QUANTITY: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEA
BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE:
BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE:
BLR PUMP SEALS N/A: OK: X REPLACE: SIZE: COMMENTS: PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE:
COMMENTS: PUMP LOOKS OLD, BUT OK. PUMP UN-INSULATED BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLA
BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HIW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SE
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS:
HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:
HW PUMP MOTOR
HW PUMP SEALS
HW PUMP SEALS
HW PUMP SEALS
HW PUMP MOTOR
HW PUMP SEALS
HW PUMP MOTOR
HW PUMP SEALS
HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:
HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:
COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:
CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:
CV PUMP SEALS N/A: X OK: REPLACE: SIZE:
CV PUMP SEALS N/A: X OK: REPLACE: SIZE:
CV TOWN OLD TO
COMMENTS:
I FOR A TELEVISION OF THE PARTY
CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY:
CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/14/94

PREPARED BY: AJN/AMS/CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 6914 BLDG NAME: EXC MAIN RETL

ELECTRIC METER: Y

GAS METER: Y SUSPECT ACM: N CONDITIONED SQFT: 63,930

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

MON: TUE: THUR: FRI: SUN: WED: SAT: PRES START: 0 0 0 0 24 24 24 24 24 24 24 9 9 9 9 10 9 9 REQ STOP: 19 21 21 21 21 21 21

REMARKS:

PRES STOP:

REQ START:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/14/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/AMS/CWW

		OKTET OB	JEINA I	10143	
BUILDING NUMBER	: 6914				
AHU NUMBER	: AHU-1	AHU LOCATION	: MER		
PEEDIC OVO # ODVALO		ANIO ECOATION			:
REFRIG SYS # SRVNG AH		SERVES AREA:	MAIN SALES	SAREA	
	% OF BLD	OG AREA HEATED:		51	
AHU UNIT TYPE SINGLE	ZONE	NU	MBER OF ZO	NES IF MZ UNIT:	0
OFMUTO					
CFM-HTG:	28,100	CFM-CLG:		28,100	
MIN %OA:	57	MAX %OA:		100	
NAMEPLATE					
TO MILE LATE					
UNIT MFG:		UNI	MODEL:	1	
SUPPLY FAN HP:	20	RET/EXH	FAN HP:	0	
SUPPLY FAN MTR MFG:		RET/EXH FAN N	/ITR MFG:		
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTF			
COMMENTS:			<u> </u>	700	
COILS					
JUILS					
Coil	Coil Type	Modulating V	alve?		
PREHEAT COIL:					
_	HOT WATER HOT WATER				
	NONE	片			
	NONE	📙			
COOLING COIL:	SVV				
SCHEDULE					
			·		
DAY SCHEDULE NO:	54		MONTH SCH	EDULE NO:	3
SCHEDULE COMMENTS:					=
SUN: N	MON: TUE: WED: TH	IUR: FRI: S	AT:		=
PRES START: 0	0 0 0	0 0	0		
PRES STOP: 24	24 24 24	24 24			
REQ START: 10	9 9 9	9 9	9		
REQ STOP: 19	21 21 21	21 21			
			21		
MONTHS JAN: FEB: MA	AR: APR: MAY: JUN:	JUL: AUG: S	SEP: OCT:	NOV: DEC:	
ON: 🛛 🛣 🖸	7 5 5 5		_		
ONTROLS					
TYPE OF CONTRO	N. S. DAIELIMATIC				
			STAT TYPE:	SINGLE SETPOINT	
PRESENT TEMP WINTR O	OCC: 0		ECK DEG F:	0	
PRESENT TEMP WINTR UNC			ECK DEG F:	0	
DDECENT TEND OF THE			AIR DEG F:	0	
PRESENT TEMP SUM O		OTHER SETPOIN			
PRESENT TEMP SUM UNO	CC: 0	OTHER SETPO	INT DEG F:	0	
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: Y	MDI EMENT F	EMAND : INIT OUT	
MAX OA DMPR CONTROL:	Y ECONOMIZER DB	· ———	MILESIMENI L	EMAND LIMIT CNTRL	
RET AIR DMPR CONTROL:	Y ECONOMIZER WB		7111	TIME CLO	
EXH AIR DMPR CONTROL:	N ECONOMIZER WE	CONTROL: [N]	TIME	CLOCK OPERATIONA	IL? N
•					
OTHER CONTROLS DES					
CONTROLS COMMEN	TS:			A STATE OF THE STA	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/14/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/AMS/CWW

BUILDING NUMBER: 6914 AHU NUMBER: AHU-2 AHU LOCATION: MER	
AND NOMBER. MICH	
REFRIG SYS # SRVNG AHU: CH-1, CH-2 SERVES AREA: OFFICE AREA % OF BLDG AREA HEATED:	<u> </u>
AHU UNIT TYPE SINGLE ZONE NUMBER OF ZONES IF MZ UNIT:	0
CFM-HTG: 3,500 CFM-CLG: 3,500 MIN %OA: 17 MAX %OA: 100	
NAMEPLATE	
UNIT MFG: AIRTEMP UNIT MODEL:	
SUPPLY FAN HP: 2 RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG: BALDOR RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: RET/EXH FAN MTR MODEL:	
COMMENTS:	
COILS	
Coil Coil Type Modulating Valve?	
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: CW	
SCHEDULE	3
SCHEDULE	3
SCHEDULE DAY SCHEDULE NO: 54 MONTH SCHEDULE NO: SCHEDULE COMMENTS:	3
SCHEDULE DAY SCHEDULE NO: 54 MONTH SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	3
SCHEDULE DAY SCHEDULE NO: 54 MONTH SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0	3
SCHEDULE NO: 54	3
SCHEDULE DAY SCHEDULE NO: 54 MONTH SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24	3
DAY SCHEDULE NO: 54 MONTH SCHEDULE NO:	
DAY SCHEDULE NO: 54	
DAY SCHEDULE NO: 54	
DAY SCHEDULE NO: 54	
SCHEDULE DAY SCHEDULE NO: SCHEDULE NO: SCHEDULE COMMENTS: 54 MONTH SCHEDULE NO: MONTH SCHEDULE NO	INT
SCHEDULE DAY SCHEDULE NO: 54 MONTH SCHEDULE NO: SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 REQ START: 10 9 NOV: DEC: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DINT 0
DAY SCHEDULE NO: 54	0 0
DAY SCHEDULE NO: 54	DINT 0
DAY SCHEDULE NO: 54	0 0
DAY SCHEDULE NO: 54	DINT 0 0 0 0
DAY SCHEDULE NO: 54	ONTRLS?
DAY SCHEDULE NO: 54	ONTRLS?
DAY SCHEDULE NO: 54	ONTRLS?

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/14/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/AMS/CWW

E	BUILDING AHU	NUMBE					AHU L	OCATION	ı: MEZ	Z ABOVI	E OFFICE	ES		
REFRIG	3 SYS # 9	SRVNG A	HU: NO	NE		i	SERVES	S AREA:	WARE	HOUSE			- -	
					% O	F BLDG	AREA H	EATED:				13	<u>.</u>	
AHU U	JNIT TYP	E HEAT	TING AND	VENTIL	ATING			N	JMBER (OF ZONE	ES IF MZ	UNIT:	0	
	С	FM-HTG:		•	7,380		CF	M-CLG:			7,380			
	N	IIN %OA:	: !		25		MA	X %OA:			100			
NAME	PLAT	E				****								
	UI	NIT MFG							IT MODE					
	SUPPLY				5				H FAN H		•	0		
	Y FAN M							XH FAN I FAN MT						
SUPPLY I		MODEL		A 4. A /VIII/W/ 1110			KE I/EXF	I FAN WII	K WODE	-L:				
COILS														
COILO	Coi	il		Coil Type	e		Mo	dulating	Valve?					
	DREHE	AT COIL					П	_						
		NG COIL					$ \square$							
	REHE	AT COIL	: NONE											
		MIDIFIER					🛭							
	COOLII	NG COIL	: NONE				니							
SCHE) III E													
OOLIEE	OLL													
	SCHEDU	LE NO:	54						MON	гн ѕсн	DULE N	O:	3	
	SCHEDU		54						MON	ГН ЅСНЕ	EDULE N	0:	3	
DAY	SCHEDU		54 MON:	TUE:	WE		UR:	FRI:	SAT:	гн ѕсн	EDULE N	0:	3	
DAY SCHEDU PRES S	SCHEDU LE COMM	SUN:	MON:	0		0	0	0	SAT:	ГН SCHE	EDULE N	O: -	3	
DAY SCHEDU PRES S PRES	SCHEDU LE COMM START: STOP:	SUN: 0 24	MON: 0 24	0 24		0	0 24	0 24	SAT: 0 24	ГН SCH	EDULE N	O:	3	
DAY SCHEDU PRES S PRES REQ S	SCHEDU LE COMM START: STOP: START:	#ENTS: SUN: 0 24 10	MON: 0 24 9	0 24 9		0 24 9	0 24 9	0 24 9	SAT: 0 24 9	гн ѕсн	EDULE N	0:	3	
DAY SCHEDU PRES S PRES REQ S	SCHEDU LE COMM START: STOP:	SUN: 0 24	MON: 0 24	0 24		0	0 24	0 24	SAT: 0 24	гн ѕсн	EDULE N	O: -	3	
DAY SCHEDU PRES S PRES REQ S REQ	SCHEDU LE COMM START: STOP: START:	#ENTS: SUN: 0 24 10	MON: 0 24 9	0 24 9		0 24 9	0 24 9	0 24 9	SAT: 0 24 9	OCT:	NOV:	O:	3	
DAY SCHEDU PRES S PRES REQ S REQ	SCHEDU LE COMM START: STOP: START: STOP:	SUN: 0 24 10 19	MON: 0 24 9	0 24 9 21		0 24 9 21	0 24 9 21	0 24 9 21	SAT: 0 24 9 21				3	_
DAY SCHEDU PRES S PRES REQ S REQ	SCHEDU LE COMM START: STOP: START: STOP: JAN:	MENTS: SUN: 0 24 10 19 FEB:	MON: 0 24 9 21	0 24 9 21 APR:	MAY:	0 24 9 21 JUN:	0 24 9 21 JUL:	0 24 9 21	SAT: 0 24 9 21 SEP:	OCT:	NOV:	DEC:	3	_
DAY SCHEDU PRES S PRES REQ S REQ MONTHS ON:	SCHEDU LE COMM START: STOP: START: STOP: JAN:	MENTS: SUN: 0 24 10 19 FEB: ⊠	MON: 0 24 9 21	0 24 9 21 APR: ⊠	MAY:	0 24 9 21 JUN:	0 24 9 21 JUL:	0 24 9 21 AUG:	SAT: 0 24 9 21 SEP: ⊠	OCT:	NOV:	DEC:		
DAY SCHEDU PRES S PRES REQ S REQ MONTHS ON:	SCHEDU LE COMM START: STOP: START: STOP: JAN:	SUN: 0 24 10 19 FEB:	MON: 0 24 9 21 MAR:	0 24 9 21 APR: ⊠	MAY:	0 24 9 21 JUN:	0 24 9 21 JUL:	0 24 9 21 AUG: ⊠	SAT: 0 24 9 21 SEP:	OCT: TYPE: DEG F:	NOV: ⊠	DEC:	NT 0	_
DAY SCHEDU PRES S PRES REQ S REQ MONTHS ON: CONTE	SCHEDU LE COMM START: STOP: START: STOP: JAN: ROLS TYPE	MENTS: SUN: 0 24 10 19 FEB: OF CON	MON: 0 24 9 21 MAR: TROLS:	0 24 9 21 APR: ⊠	MAY:	0 24 9 21 JUN:	0 24 9 21 JUL:	O 24 9 21 AUG:	SAT: 0 24 9 21 SEP:	OCT: TYPE: DEG F: DEG F:	NOV: ⊠	DEC:	NT 0 0	
DAY SCHEDU PRES S PRES S REQ S REQ MONTHS ON: CONTF	SCHEDU LE COMM START: STOP: START: STOP: JAN: Z ROLS TYPE SENT TE NT TEMP	SUN: 0 24 10 19 FEB: OF CON MP WINT	MON: 0 24 9 21 MAR: ITROLS: FR OCC: UNOCC:	0 24 9 21 APR: ⊠	MAY:	0 24 9 21 JUN: ⊠	0 24 9 21 JUL:	O 24 9 21 AUG:	SAT: 0 24 9 21 SEP: MOSTAT DECK I DECK I ED AIR I	OCT: TYPE: DEG F: DEG F: DEG F:	NOV: ⊠	DEC:	NT 0	
DAY SCHEDU PRES S PRES REQ S REQ MONTHS ON: CONTE	SCHEDU LE COMM START: STOP: START: STOP: JAN: Z ROLS TYPE SENT TE	SUN: 0 24 10 19 FEB: OF CON MP WINT	MON: 0 24 9 21 MAR: X TROLS: TR OCC: UNOCC:	0 24 9 21 APR: ⊠	MAY:	0 24 9 21 JUN: ⊠	0 24 9 21 JUL: ⊠	O 24 9 21 AUG:	SAT: 0 24 9 21 SEP: MOSTAT DECK I DECK I DINT DES	OCT: TYPE: DEG F: DEG F: DEG F: SCRIP:	NOV: ⊠	DEC:	NT 0 0	
DAY SCHEDU PRES S PRES S REQ S REQ MONTHS ON: CONTF	SCHEDU LE COMM START: STOP: START: STOP: JAN: Z ROLS TYPE SENT TEMP RESENT TEMP	SUN: 0 24 10 19 FEB: WHO WINTE	MON: 0 24 9 21 MAR: TROLS: TROCC: UNOCC: UNOCC:	0 24 9 21 APR: ⊠	MAY:	0 24 9 21 JUN: ⊠ 0 0 0 0 0	O 24 9 21 JUL:	O 24 9 21 AUG: HERM HOT COLE MIX R SETPO	SAT: 0 24 9 21 SEP: MOSTAT DECK I DECK I DINT DES	OCT: TYPE: DEG F: DEG F: SCRIP: DEG F:	NOV: ⊠	DEC:	NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
DAY SCHEDU PRES S PRES S REQ S REQ S ON: CONTF PRES PRESE PRESE MIN O	SCHEDU LE COMM START: STOP: START: STOP: JAN: Z ROLS TYPE SENT TE NT TEMP RESENT	MENTS: SUN: 0 24 10 19 FEB: WINTR WINTR TEMP SUM CONTRO	MON: 0 24 9 21 MAR: ETROLS: ETROCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC:	0 24 9 21 APR: ⊠	MAY:	0 24 9 21	0 24 9 21 JUL: ⊠	O 24 9 21 AUG: THERM HOT COLE MIX R SETPOHER SET	SAT: 0 24 9 21 SEP: MOSTAT DECK I DECK I DINT DES	OCT: TYPE: DEG F: DEG F: SCRIP: DEG F:	NOV:	DEC:	NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	=
DAY SCHEDU PRES S PRES REQ S REQ MONTHS ON: CONTF PRES PRESE PI PRESS MIN O MAX O	SCHEDU LE COMM START: STOP: START: STOP: JAN: Z ROLS TYPE SENT TEMP RESENT TEMP SENT TEMP A DMPR	MENTS: SUN: 0 24 10 19 FEB: WINTR WINTR TEMP SUM CONTRO	MON: 0 24 9 21 MAR: ETROLS: FR OCC: UNOCC:	PNEUM	MAY: ATIC KED AIF	0 24 9 21	O 24 9 21 JUL: OTHE OTI	THERM HOT COLE MIX R SETPOHER SET OL: N	SAT: 0 24 9 21 SEP: MOSTAT DECK I DECK I DINT DES	OCT: TYPE: DEG F: DEG F: SCRIP: DEG F:	NOV:	DEC: SETPOI	NT 0 0 0 0 NTRLS?	Z
DAY SCHEDU PRES S PRES REQ S REQ MONTHS ON: CONTF PRES PRESE MIN O MAX O RET AI	SCHEDU LE COMM START: STOP: START: STOP: JAN: Z ROLS TYPE SENT TEMP RESENT SENT TEMP A DMPR A DMPR	MENTS: SUN: 0 24 10 19 FEB: WINTR WINTR TEMP SUM CONTRO	MON: 0 24 9 21 MAR: ETROLS: FR OCC: UNOCC: UNOC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC: UNOCC:	PNEUM	MAY: ATIC KED AIF	0 24 9 21	OTHE OTHE CONTRO	THERM HOT COLE MIX R SETPOHER SET OL: N	SAT: 0 24 9 21 SEP: MOSTAT DECK I DECK I DINT DES	OCT: TYPE: DEG F: DEG F: SCRIP: DEG F:	NOV: SINGLE	DEC: SETPOI	NT 0 0 0 0 NTRLS?	Z
DAY SCHEDU PRES S PRES REQ S REQ S REQ MONTHS ON: CONTF PRES PRESE MIN O MAX O RET AI EXH AI	SCHEDULE COMM START: STOP: START: STOP: JAN: ZOLS TYPE SENT TEMP RESENT SENT TEMP RESENT TEMP A DMPR R DMPR R DMPR	MENTS: SUN: 0 24 10 19 FEB: WINTR WINTR TEMP SUM CONTRO	MON: 0 24 9 21 MAR: X TROLS: TROCC: UNOCC: UNOCC: UNOCC: UNOCC: N DL: Y DL: N	PNEUM	MAY: ATIC KED AIF	0 24 9 21	OTHE OTHE CONTRO	THERM HOT COLE MIX R SETPOHER SET OL: N	SAT: 0 24 9 21 SEP: MOSTAT DECK I DECK I DINT DES	OCT: TYPE: DEG F: DEG F: SCRIP: DEG F:	NOV: SINGLE	DEC: SETPOI	NT 0 0 0 0 NTRLS?	Z

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/14/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/AMS/CWW

-													
	BUILDING	S NUMBER	R: 691	4									
	AHU	J NUMBER	R: AHL	J-4			AHU L	OCATIO	N: MEF	₹			
REFR	IIG SYS#	SRVNG AI	HU: CI	H-1, CH-2			SERVE	S AREA	: SOUT	H SHOP	S		
					% (OF BLDG	AREA H	EATED:	:			18	
AHU	UNIT TYP	E MULT	ZONE					N	UMBER	OF ZON	ES IF MZ	UNIT:	5
		FM-HTG:			9.620		CI	FM-CLG	: [9,620		
	F	MIN %OA:			0		M/	X %OA	:		100		
NAME	PLAT	E											
	U	NIT MFG:						UI	NIT MODI	EL:			
	SUPPLY	FAN HP:			10			RET/E	XH FAN I	1P:		0	
SUPF	LY FAN N	MTR MFG:					RET/	EXH FAN	MTR ME	•G:			
SUPPLY	FAN MTF	R MODEL:					RET/EXH	I FAN M	TR MODI	EL:			
	COI	MMENTS:											
COILS	3												
	Co	il		Coil Typ	е		Mo	dulating	y Valve?				
	PREHE	AT COIL:	NONE										
	HEATI	NG COIL:	HOT V	VATER			\boxtimes						
	REHE	AT COIL:	NONE										
		MIDIFIER:	NONE										
	COOLI	NG COIL:	CW										
SCHE	DULE												
DAY	/ SCHEDU	ILE NO:	54						MON.	TH SCHI	EDULE N	0:	3
SCHEDU	JLE COM	MENTS:											
,		SUN:	MON:	TUE:	WE	D· TH	UR:	FRI:	SAT:				-
PRES	START:	0011.	0	0		0	0		0				
	S STOP:	24	24	24	===	<u>24</u> ==	24	24	24				
	START:	10	9	9		9	9	9	9				
REC	STOP:	19	21	21		21	21.	21	21				
													-
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
	\boxtimes		\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes		\boxtimes	\boxtimes	\boxtimes	: -
CONT	ROLS				,,								
	TYPE	OF CONT	ROLS:	PNEUN	IATIC				MOSTAT		SINGLE	SETPOINT	
PRI	ESENT TE	MP WINTE	R OCC:			0			T DECK I			0	
PRESE	ENT TEMP	WINTR U	NOCC:			0			D DECK I ŒD AIR I			0	
	DESENT	TEMP SUM	# OCC+			0	OTHE		OINT DE				
		MP SUM U				0			POINT E			0	
MIN	DA DMPR	CONTROL	.: N	MD	KED All	R DMPR	CONTRO	L: T	IMPLE	EMENT I	DEMAND	LIMIT CNT	RLS? N
		CONTROL	=				CONTRO	_	ร์			TIME CLO	_
		CONTROL	_				CONTRO		1	TIME	CLOCK	OPERATION	
		CONTROL						·	-				I
0	THER CO	NTROLS D	ESCR:										
	CONTRO	LS COMM	IENTS:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/14/94

LOCATION: FT. RILEY, KS PREPARED BY: AJN/AMS/CWW AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBE	R: 6914						
AHU NUMBE			AHU LOCATIO	N: MEZZANINE	<u> </u>		
REFRIG SYS # SRVNG		2	SERVES AREA:			PS	
			AREA HEATED:			12	
AHU UNIT TYPE MUL	TI ZONE		N	UMBER OF ZON	ES IF MZ	UNIT: 6	
CFM-HTG	:	6,790	CFM-CLG:		6,790		
MIN %OA		0	MAX %OA:		100		
NAMEPLATE							
UNIT MFG			UN	IIT MODEL: BE	D15		
SUPPLY FAN HP		7.5		(H FAN HP:		0	
SUPPLY FAN MTR MFG SUPPLY FAN MTR MODEL		12	RET/EXH FAN RET/EXH FAN M	<u></u>			
COMMENTS			NEI/EXH FAN W	IK MODEL.		The second secon	
COILS							
Coil	Coil Typ	oe .	Modulating	Valve?			
PREHEAT COIL	: NONE						
HEATING COIL							
REHEAT COIL HUMIDIFIER							
COOLING COIL			_ 🗒				
SCHEDULE	77 (M. A. A. A.						
JOHLDOLL							
DAY SCHEDULE NO:	5.4			MONTH COL	EDIU E NO		
DAY SCHEDULE NO: SCHEDULE COMMENTS:	54			MONTH SCH	EDULE NO): 3	
	MON: TUE	: WED: TH	UR: FRI:	MONTH SCH	EDULE NO): 3	
SCHEDULE COMMENTS:			UR: FRI:		EDULE NO): 3	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE 0 0 24 24	0 0	0 0 24	SAT: 0 24	EDULE NO): 3	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10	MON: TUE 0 0 24 24 9 9	0 0 24 9	0 0 24 24 9 9	SAT: 0 24 9	EDULE NO): 3	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE 0 0 24 24	0 0 24 9	0 0 24	SAT: 0 24	EDULE NO	0: 3	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB:	MON: TUE 0 0 24 24 9 9	0 0 24 9	0 0 24 24 9 9	SAT: 0 24 9	NOV:	DEC:	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON:	MON: TUE 0 0 24 24 9 0 21	0 0 24 9 21	0 0 24 24 9 9 21 21	SAT: 0 24 9 21			
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON:	MON: TUE 0 0 24 24 9 09 21 21 MAR: APR:	0 0 24 0 9 21 MAY: JUN:	0 0 24 24 9 9 21 21 JUL: AUG:	SAT: 0 24 9 21 SEP: OCT:	NOV:	DEC:	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON:	MON: TUE 0 0 24 24 9 21 21 MAR: APR:	0 24 3 9 21 MAY: JUN:	0 0 24 24 9 9 21 21 JUL: AUG: ☑ ☐	SAT: 0 24 9 21 SEP: OCT: MOSTAT TYPE:	NOV:	DEC:	
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON:	MON: TUE	0 24 3 9 21 MAY: JUN:	0 0 24 24 9 9 21 21 JUL: AUG: ☑ ☐	SAT: 0 24 9 21 SEP: OCT: SEP: OCT:	NOV:	DEC: SETPOINT 0	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CON	MON: TUE	0 24 9 21 MAY: JUN:	0 0 24 24 9 9 21 21 JUL: AUG: ☑	SAT: 0 24 9 21 SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F:	NOV:	DEC: SETPOINT 0 0	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CON PRESENT TEMP WINT	MON: TUE	0 0 24 9 21 MAY: JUN:	0 0 24 24 9 9 21 21 JUL: AUG: ☑	SAT: 0 24 9 21 SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F:	NOV:	DEC: SETPOINT 0	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CON PRESENT TEMP WINTR LEAD	MON: TUE 0 0 0 24 24 9 21 21 MAR: APR:	0 0 9 9 21 MAY: JUN:	O O O O O O O O O O O O O O O O O O O	SAT: 0 24 9 21 SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F:	NOV:	DEC: SETPOINT 0 0	
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CON PRESENT TEMP WINTE PRESENT TEMP SU	MON: TUE 0 0 0 24 24 9 21 21 MAR: APR:	0 0 9 9 21 MAY: JUN: MATIC 0 0 0 0 0 0	O O O O O O O O O O O O O O O O O O O	SAT: 0 24 9 21 SEP: OCT: SEP: OCT: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F: DECK DEG F:	NOV: SINGLE S	DEC: SETPOINT 0 0 0	? N
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON:	MON: TUE 0 0 0 24 24 9 21 21 MAR: APR: MAR: APR: MAR: APR: MOCC: MOCC: JNOCC: L: Y MIX EC	MAY: JUN: MATIC 0 0 0 0 0 0 0 0	O O O O O O O O O O O O O O O O O O O	SAT: 0 24 9 21 SEP: OCT: SEP: OCT:	NOV: SINGLE S	DEC: SETPOINT 0 0 0	=
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19 MONTHS JAN: FEB: ON:	MON: TUE	MAY: JUN: MATIC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O 0 24 24 9 9 21 21 JUL: AUG: I WARREN HOT COLD MIXION OTHER SET CONTROL: Y CONTROL: N	SAT: 0 24 9 21 SEP: OCT: SEP: OCT: DECK DEG F: DEC	NOV: SINGLE S DEMAND L	DEC: SETPOINT 0 0 0 0 UMIT CNTRLS	: 🔯

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE:** 10/14/94

PREPARED BY: AJN/AMS/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER: 6914	BOILER RM LOCATION: MER
BOILER UNIT	
	RTER SERVES AREA OR SERVICE:
SOURCE OF BLDG HEAT	
● N BOILER	CONVERTER
BOILER TAG: BLR-1	CONVERTER TAG:
BOILER TYPE: HW (UP TO 250 DEG)	CONVERTER TYPE:
FUEL TYPE: NAT. GAS	CONV HT SOURCE:
CENTRAL PLANT DIRECT	
NAMEPLATE	% AREA HEATED BY BB RADIATION:
	1000000
BOILER MFG: OSAGE	BLR CAP OUTPUT (BTUH): 1,600,000
UNIT MODEL: 3-5-350	BLR CAP INPUT (BTUH): 2,000,000
COMMENTS:	
SCHEDULE	
	MONTH SECHDULE NO: 1
DAYS SCHEDULE NO: 54 SCHEDULE COMMENTS:	MONTH SECHDOLE NO.
	WED: THUR: FRI: SAT:
PRES START: 0 0 0	$\frac{0}{24} = \frac{0}{24} = \frac{0}{24}$
PRES STOP: 24 24 24 24 24 PREQ START: 10 9 9	<u>24</u> <u>24</u> <u>24</u> <u>9</u> 9
REQ STOP: 19 21 21	$\frac{3}{21}$ $\frac{3}{21}$ $\frac{3}{21}$ $\frac{3}{21}$ $\frac{3}{21}$
The state of the s	
MONTHS JAN: FEB: MAR: APR: MAY	Y: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: 🛛 🖂 🖂 🖂 🗖	
CONTROLS	
TYPE OF BLR CONTROLS: ELECTRIC	RESET CONTROLS: N
OPERATING SETPOINT:	DEG F or PSIG
TYPE OF BURNER CONTROLS:	
CONTROLS COMMENTS:	
HW PUMP	
PUMP TAG: 1 PUMP HE	
PUMP SERVICE: HW PUMP	PUMP MODEL: CVH184TTDR2026
HW PUMP	
PUMP TAG: 2 PUMP HF	P: 5 PUMP MFG: LEESON
PUMP SERVICE: HW PUMP	PUMP MODEL: N184117DBIA

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/AMS/CWW

EMC NO: 1406-001

DATE: 10/14/94

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

				· · · · ·					· · · · · · · · · · · · · · · · · · ·
BLDG NUMBER:	6914		BLDG NAMI	E: EXC	MAIN R	ETL			
REF. UNIT NUMBER	/TAG: CH-1				LOCA	TION (MI	ER#): C	UTSIDE	
					AH	U'S SER	VED: A	HU-1,2,4	,5
	UNIT TYPE	RECIPROC	ATING WITH AI	R COOLE	ED CON	DENSING	UNIT		
NAMEPLATE	! #								
CHILLER M	FG: COPEL	AMETIC	!		TOWER	MFG:			
CHILLER MOD	EL: 6DK1-3	500-TSK		# OF T	OWER I	FANS:			16
CHILLER SERIAL	NO: 88H758	79		T	OWER F	AN V:			0
CHILLER	२ V:		208	TOWE	RFANA	AMPS:			0
CHILLER AM			125	TO	WER FA	N HP:			0.33
CHILLER			3						
CHILLER CAP (TON	4S):		127						
COMMEN	ITS:								
SCHEDULE									
DAYS SCHEE	DULE NO:	54		МО	NTHS S	CHEDUL	E NO:	2	
SCHEDULE CO	MMENTS:								
	SUN: MO	N: TUE:	WED: TH	JR:	FRI:	SAT:			
PRES START:	0	0 0	0	0	0 -	0			
PRES STOP:	24	24 24	24	24	24	24			
REQ START:	10	9 9	9	9	9	9			
REQ STOP:	19 2	21 21	21	21	21	21			
MONTHS JAN:	FEB: MAR	: APR:	MAY: JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:		П	\boxtimes	\boxtimes	\boxtimes	\boxtimes	П	П	П
		<u> </u>							<u> </u>
CONTROLS									
TYPE OF CO	ONTROLS:	ELECTRIC		_					
CWS:	SETPOINT:		0	- CN	IWS SET	DOINT.			0
	SETPOINT:		<u>_</u>		IWR SET				0
555	0011777111							_	
	SS LITE HI: LITE LOW:	N 1	TEMP LITE H TEMP LITE LOW	``	011	HER INDI	CATIOR	S:	
	GAUGES:		TEMP GAUGES						
	'	,		لننا ،					
CONTROL	こ つつけげにほし	٠							
CONTROLS									
		<u>s</u>							
CONTROLS CW and CNW PUMP TAG: 1		S PUMP HE):	7.5	PUM	P MFG:	LINCOL	N	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/14/94

PREPARED BY: AJN/AMS/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

			. –								
BLDG NUMBER:	: 6914			BLD	G NAME:	EXC	MAIN R	RETL			
REF. UNIT NUMBE	ER/TAG:	CH-2					LOCA	TION (M	ER#): (OUTSIDE	
								IU'S SÈR		AHU-1,2,4	
	UNIT	TYPE F	RECIPRO	CATING V	NITH AIR	COOL	ED CON	DENSING	3 UNIT		
NAMEPLAT	Έ								· - ·	-	
CHILLER	MFG:	COPELA	METIC		:		TOWER	MFG:			
CHILLER MC	1	6DK1-350				# OF	TOWER	ř			16
CHILLER SERIAL	L NO:	88H75879	9			1	OWER F	FAN V:			0
CHILL	ER V:			208		TOW	ER FAN	AMPS:			0
CHILLER A	MPS:			125		TC	OWER FA	N HP:			0.33
CHILLEI	7			3							
CHILLER CAP (TO	ONS):			127							
COMME	ENTS:										
CHEDULE											
DAYS SCH	EDULE !	NO:	54			MC	2 SHTAC	CHEDUL	E NO:	2	
SCHEDULE CO						1110		-112002	_ 110.		
	CLINI	MON-	7115	. \4/55	. 711115		F 5.				
PRES START:	SUN:	MON:					FRI:	SAT:			
PRES STOP:	24	24				0 24	0 =	0 24			
REQ START:	10	9				9 =	9	9			
REQ STOP:	19	21					21 =	21			
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:	П		П		\boxtimes	\boxtimes	\boxtimes	\boxtimes	П		
			<u> </u>								
ONTROLS											
TYPE OF (CONTRO	DLS: EL	ECTRIC								
cws	SSETPO	DINT:			0	CN	NWS SET	POINT:			0
	R SETPO	_			0		WR SET				0
DDI	ESS LITI	EHI: 🕟		TEMP	LITE HI:	N		HER INDI	CATIOD		
	S LITE L	=	≓	TEMP LIT		N	011	ועטו	CATIOR	3:	_
_	SS GAU	_	=	TEMP G		Z					
CONTRO		-	ا								
W and CNV			<u> </u>								
PUMP TAG: 1			PUMP HI	P: [7.5		PIIM	P MFG:	LINCOL	N	
	N PUMP	(Chilled \		-		<u> </u>	PUMP		TV-299		
JIII OLIVAIOL. OV	T I DIVIE	(Cimied)	valci)				FUNIFIN	NODEL:	1 V-299	3	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

PIPE INSULATION

DUCT INSULATION

COMMENTS:

OK: X

OK:

MISSING:

MISSING:

N/A:

N/A: X

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

10' @ 2-1/2"

CWW

CHECKED BY:

AJN

6914		FILE:	6914.XLS	
IVAC UPGRAD	E OBSERVA	ATIONS		
MER MEZZANINE				
	MODEL:			
FC - Fan Coil (Indicat	te 2P for 2 Pipe or	4P for 4 Pi	pe)	
RHT - Reheat Systen				
IND - Induction Syste	m			
SIZE:	DPR-ACT	OK: X	RP- ACT:	
SIZE:	DPR-ACT	OK: X	RP- ACT:	
SIZE:	DPR-ACT	OK:	RP- ACT:	
SIZE:	DPR-ACT	OK:	RP- ACT:	
SIZE:	DPR-ACT	OK:	RP- ACT:	
			DPR-ACT = Dampe	er Actuator
			RP-ACT = Replace	Actuator
ISIZE:				
				
S: COMMI	ENTS:	<u>'</u>		
СОММІ	ENTS:			
S: COMMI	ENTS:	N/A		
COMM	ENTS:			
				· · · · · · · · · · · · · · · · · · ·
SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
			RP-ACT = Replace	Actuator
			RP-BD = Replace B	lody
ISIZE:				
SIZE:				
-				

ESTIMATED QUANTITY:

ESTIMATED QUANTITY:

${\bf E}\ {\bf M}\ {\bf C}$ ENGINEERS, INC.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

BLDG: **6914** FILE: 6914.XLS

	AIR	HANDLIN	IG UNIT - HVA	UPGRADE	OBSERV	ATIONS				
AHU NO.:	AHU-2	LOCATIO	` '	MEZZANINE				,		
AHU TYPE:	SZ	MFG.:	AIRTEMP		MODEL:					
SZ - Single Zone	H&V - Hea	ating & Vntltng	. FC - I	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)			
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT	- Reheat System						
DD - Dual Duct	UH - Unit	Heater	IND -	Induction System						
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:			
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:			
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
CT/ACCU FAN MTR							DPR-ACT = Dampi	er Actuator		
CT/ACCU FAN MTR							RP-ACT = Replace	Actuator		
FILTED OF CTION	TAT/A	IOV. V	IDEDI ACE:	ICI7E.						
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:						
COMMENTS:										
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:					
SUPPLY FAN MOTOR	OK: X	REPLACE								
INLET VANES	N/A: X	OK:	COMMENTS:							
RETURN AIR FAN	OK:	REPLACE	ACE FAN BEARINGS: COMMENTS: N/A							
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	COMMENTS:					
COMMENTS:										
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	MAN. VALVES	RP- ACT:	RP-BD:		
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: *	RP- ACT:X	RP-BD:		
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:		
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:		
COMMENTS:	* CONTRO	OL VALVE DIS	SCONNECTED FROM	I AIR			RP-ACT = Replace	Actuator		
							RP-BD = Replace I	Body		
AHU PUMP MOTOR	N/A: X	IOK:	REPLACE:	SIZE:						
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			, , , , , , , , , , , , , , , , , , , 			
COMMENTS:										
							•			
PIPE INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY		UGLY			
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY	:				
COMMENTS:										

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

AJN

CHECKED BY:

AJN 6914.XLS

	ΔIR	HANDI IN	IG UNIT - HVAC	UPGRADE	OBSERVA	TIONS				
HU NO.:	AHU-3	LOCATION		PING AREA						
AHU TYPE:	SZ	MFG.:	1(1411)		MODEL:					
SZ - Single Zone		ting & Vntltng	. FC - F	an Coil (Indicate :		4P for 4 Pip	oe)			
MZ - Mulitzone	1	able Air Vol.		Reheat System	,		•			
DD - Dual Duct	UH - Unit F			Induction System						
COMP. MOTOR	N/A:	OK: X	IREPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:			
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	ок: х	RP- ACT:			
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
CT/ACCU FAN MTR	N/A: X	ОК:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:			
CT/ACCU FAN MTR	SPACE IS	VERY HOT,	EVEN THOUGH T-ST.	AT SET AT 60 DE	GREES F		DPR-ACT = Dampe	r Actuator		
CT/ACCU FAN MTR							RP-ACT = Replace	Actuator		
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:						
COMMENTS:										

SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:					
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMEN	COMMENTS:					
INLET VANES	N/A: X	OK:	COMMENTS:							
DETUDNIAID FAN	OK:	IDEDI ACE	FAN BEARINGS:	NTS:	N/A					
RETURN AIR FAN	IIUN.	five ryor	. I AN DEMINIOUS	COMME	110.	,, .				
RETURN AIR FAN RETURN FAN MOTOR		REPLACE		COMMEN						
RETURN FAN MOTOR	OK:									
RETURN FAN MOTOR										
RETURN FAN MOTOR COMMENTS:						OK: X	RP- ACT:	RP-BD:		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL	OK:	REPLACE	REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT:	RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT:	RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace	RP-BD RP-BD RP-BD e Actuator Body		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD e Actuator Body		
RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace	RP-BD RP-BD RP-BD e Actuator Body		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG:

6914

FILE: 6914.XLS

	115	LANIDI IN	O LIMIT L	VAC LIDCDAL	TE OBSEDV	2MOIT			
				VAC UPGRAI		TIONS			
NHU NO.:	AHU-4	LOCATION	1	LEFT OF MAIN EN		BD-15			
NHU TYPE:	MZ-6	MFG.:	AIR TEMP	50 5 0 11 / L	MODEL:		201		
SZ - Single Zone		ing & Vntltng.		FC - Fan Coil (Indic		r 4P tor 4 Pi	pe)		
MZ - Mulitzone	VAV - Varia			RHT - Reheat Syste					
DD - Dual Duct	UH - Unit H	eater		IND - Induction Sys		75.7 V	155 467		
OMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:		
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:		
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:		OK:	RP- ACT:		
COMP. MOTOR	N/A:	OK:	REPLACE:	SIZE:		OK:	RP- ACT:		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:		ОК:	RP- ACT:		
CT/ACCU FAN MTR	DAMPER A	CTUATORS	DISCONNECT	ED FROM PNEUMA	TIC LINES,		DPR-ACT = Dampe	er Actuator	
CT/ACCU FAN MTR	NO PNEUM	MATIC AIR TO	CONTROL V	ALVES. DAMPERS	IN 100% RA		RP-ACT = Replace	Actuator	
	POSITION								
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:					
COMMENTS:									
	-								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARING		COMMENTS:				
SUPPLY FAN MOTOR	OK: X	REPLACE	:	СОМ	COMMENTS:				
		OK:	COMMENTS	S:					
INI FT VANES	IN/A: X								
INLET VANES	N/A: X		FAN BEARING		MENTS:	N/A			
RETURN AIR FAN	OK:	REPLACE	FAN BEARING	SS: COM	MENTS: MENTS:	N/A			
RETURN AIR FAN RETURN FAN MOTOR			FAN BEARING	SS: COM		N/A			
RETURN AIR FAN	OK:	REPLACE	FAN BEARING	SS: COM		N/A			
RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARING	SS: COM		N/A			
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK:	REPLACE REPLACE	FAN BEARING	SS: COM	MENTS:	N/A	RP-ACT:	RP-BD:X	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK: OK:	REPLACE REPLACE	FAN BEARING : REPLACE:	SS: COM	MENTS:		RP- ACT:		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK: N/A: N/A:	REPLACE REPLACE OK: X	REPLACE:	SS: [COM COM	MENTS: : CNTLVLV : CNTLVLV	OK:		RP-BD:X RP-BD:X RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: N/A: N/A: X	REPLACE REPLACE OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE	MENTS: CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT:	RP-BD:X	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A:	REPLACE REPLACE OK: X	REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE	MENTS: CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT:	RP-BD:X RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: N/A: N/A: X	REPLACE REPLACE OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE	MENTS: CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: N/A: X	REPLACE REPLACE OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE	MENTS: CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: N/A: X	REPLACE REPLACE OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE	MENTS: CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	OK: OK: N/A: N/A: N/A: N/A: X N/A: X	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE	MENTS: CNTLVLV: CNTLVLV: CNTLVLV: CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: X	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE SIZE	MENTS: CNTLVLV: CNTLVLV: CNTLVLV: CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: N/A: N/A: N/A: N/A: X N/A: X	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE SIZE	MENTS: CNTLVLV: CNTLVLV: CNTLVLV: CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: N/A: X	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE SIZE	MENTS: CNTLVLV: CNTLVLV: CNTLVLV: CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE SIZE	MENTS: CNTLVLV: CNTLVLV: CNTLVLV: CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	OK:	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE SIZE SIZE	MENTS: CNTLVLV: CNTLVLV: CNTLVLV: CNTLVLV	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE SIZE SIZE	MENTS: CNTLVLV: CNTLVLV: CNTLVLV: CNTLVLV:	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SS: COM COM SIZE SIZE SIZE SIZE SIZE SIZE	MENTS: CNTLVLV: CNTLVLV: CNTLVLV: CNTLVLV	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

AJN

CHECKED BY:

AJN

	10, 10		DI DO	0044	CHECKED	BY:	AJ۱
	FFDIAT	- A - Di - A - A - A - A - A - A - A - A - A -	BLDG:	6914	FILE:	6914.XLS	
K	EFRIGE			NT - HVAC UPGRADE O	BSERVATIO	NS	
CHILLER / EQUIP. NO.		CH-1,2	LOCATION	(RM) MER			
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	MODE		· · · · · · · · · · · · · · · · · · ·	
C-WCT = Centrifugal w/ W				R-ACCU = Reciprocating w/ Air Co			
R-WCT = Reciprocating w		Cooling Tow	er	ASB-WCT = Absorption w/ Water S	Side Cooling Tow	er	
ACCU = Air Cooled Conde				CT = Cooling Tower			
	N/A:	OK: X	REPLACE:	SIZE:			
	N/A:	OK: X	REPLACE:	SIZE:			
	N/A:	OK: X	REPLACE:	SIZE:			
COMP. MOTOR	N/A:	ок: х	REPLACE:	SIZE:		····	
	N/A: X	OK:	REPLACE:	SIZE:			
	N/A: X	OK:	REPLACE:	SIZE:			
	N/A: X	OK:	REPLACE:	SIZE:			
COMMENTS:	SEE OTHE	R SHEET FO	R ACCU'S; TY	PICAL OF CHILLER 2 ALSO.			
						71 71	
	N/A: X	OK:	REPLACE:	SIZE:			
AIR COOLED COND.	N/A: X	OK:	REPLACE:	SIZE:			"
COMMENTS:						****	
			***		·		
HILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANT	ITY:		·
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANT			
COMMENTS:		·	<u> </u>				
				w	-		
CHW PUMP MOTOR	N/A:	ОК: Х	REPLACE:	SIZE:			
	N/A:	OK: X	REPLACE:	SIZE:			
	V/A:	OK:	REPLACE:	SIZE:			
	V/A:	OK:	REPLACE:	SIZE:			
	V/A:	OK:	REPLACE:	SIZE:			
	V/A:	OK:	REPLACE:	SIZE:			
	V/A:	OK:	REPLACE:	SIZE:			
	V/A:	OK:	REPLACE:	SIZE:			
		NSULATION I		OIZE.			
		10021110111	O MICOING				

E M C ENGINEERS, INC.PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

13 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

			BLDG:	6914			FILE:	691	14.7.60
	REFRIGER	RATION E	QUIPMEN	IT - HVAC	UPGRAI	DE OBSI	ERVATI	ONS	
HILLER / EQUIP. NO.		ACCU-1-4	LOCATION	(RM)	OUTSIDE BI	DG NOR	TH		
REFG, EQUIP, TYPE:		ACCU	MFG.:	CARRIER		MODEL:	09DE-09		
C-WCT = Centrifugal w/ W	Vater Side Coc	ling Tower			Reciprocating				
R-WCT = Reciprocating w	/ Water Side C	Cooling Tower			Absorption w	/ Water Side	e Cooling T	ower	
CCU = Air Cooled Conde	ensing Unit	•		CT = Coolin					
OMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:				
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:				
OMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:				
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:				
T/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:				
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:				
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:				
COMMENTS:	TYPICAL (OF 8 CONDEN	ISER FANS.	ACCU IN GO	OD CONDITION	ON			
			Jees: 40=		TC) 7F				
COOLING TOWER	N/A:	OK:	REPLACE:		SIZE:				
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:				
COMMENTS:									
			<u></u>		1-0-11-7-	2 OLIANITIT	V.		
CHILLER INSUL.	N/A: X	OK:	MISSING:		ESTIMATE				
CHW PIPE INSUL.	N/A: X	OK:	MISSING:		ESTIMATE	D QUANTII	Y:		
COMMENTS:									
			-			 -		_	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:				
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:				
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:				
CHW PUMP SEALS	N/A: X	OK:	REPLACE		SIZE:				
CHW PUMP MOTOR	N/A: X	OK:	REPLACE		SIZE:				
	N/A: X	OK:	REPLACE		SIZE:				
CHW PUMP SEALS	∭N/A. ∧								
	N/A: X	OK:	REPLACE		SIZE: SIZE:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

BOILER/CONVERTER NO. BOILER TYPE: CONVERTER TYPE: STM - Steam HW - Hot Water HTHW COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION N/A:	BLR-1 HW HW - Steam to H I/HW - High Ten SPHERIC: 1984	BLDG: NVERTER - HVA LOCATION (RM) MFG.: SUPI MFG.: Hot Water Conv. Inp. HW to HW Cv. POWER: X REPLACE: REPLACE: MISSING: MISSING: X	MER RIOR HTHW/S DHW - D OK: SIZE: SIZE:	MODEL: 3-5 MODEL: TM - High Temp HW I	ONS -350 to Steam onvertor PLACE:	6914.XLS Convertor	
BOILER/CONVERTER NO. BOILER TYPE: CONVERTER TYPE: STM - Steam STM/H HW - Hot Water HTHW COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS:	BLR-1 HW HW - Steam to H //HW - High Ten SPHERIC: 1984 COK: COK:	LOCATION (RM) MFG.: SUPI MFG.: Hot Water Conv. Inp. HW to HW Cv. POWER: X REPLACE: REPLACE: MISSING:	MER RIOR HTHW/S DHW - D OK: SIZE: SIZE:	MODEL: 3-5 MODEL: TM - High Temp HW to lomestic Hot Water Co	-350 to Steam onvertor PLACE:		
BOILER/CONVERTER NO. BOILER TYPE: CONVERTER TYPE: STM - Steam HW - Hot Water HTHW COMP. MOTOR COMMENTS: BLR INSULATION N/A: COMMENTS:	BLR-1 HW HW - Steam to H //HW - High Ten SPHERIC: 1984 COK: COK:	LOCATION (RM) MFG.: SUPI MFG.: Hot Water Conv. Inp. HW to HW Cv. POWER: X REPLACE: REPLACE: MISSING:	MER RIOR HTHW/S DHW - D OK: SIZE: SIZE:	MODEL: 3-5 MODEL: TM - High Temp HW to lomestic Hot Water Co	-350 to Steam onvertor PLACE:		
CONVERTER TYPE: STM - Steam HW - Hot Water COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:	HW - Steam to H //HW - High Ten SPHERIC: 1984 COK: OK:	MFG.: Hot Water Conv. np. HW to HW Cv. POWER: X REPLACE: REPLACE:	SIZE: SIZE:	MODEL: TM - High Temp HW I Iomestic Hot Water Co X REI	to Steam onvertor		
STM - Steam STM/HHW - Hot Water HTHW COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR DIPLE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:	//HW - High Ten SPHERIC: 1984 (OK: (OK:	Hot Water Conv. Inp. HW to HW Cv. IPOWER: X REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	TM - High Temp HW to the lomestic Hot Water Control X REI	onvertor PLACE:		
HW - Hot Water HTHW COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:	//HW - High Ten SPHERIC: 1984 (OK: (OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	omestic Hot Water Co	onvertor PLACE:		
COMP. MOTOR COMP. MOTOR COMP. MOTOR COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR N/A:	SPHERIC: 1984 (OK: (OK:)	POWER: X REPLACE: REPLACE: MISSING:	SIZE: SIZE:	omestic Hot Water Co	onvertor PLACE:		
COMP. MOTOR COMP. MOTOR COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR N/A:	1984 (OK: (OK:	REPLACE: REPLACE: MISSING:	SIZE: SIZE:	X REI	PLACE:	60' @ 4*	
COMP. MOTOR COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE:	ED QUANTITY:		60' @ 4*	
COMP. MOTOR CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE:			60' @ 4*	
CT/ACCU FAN MTR CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE:			60' @ 4*	
CT/ACCU FAN MTR N/A: > CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE:			60' @ 4*	
CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE:			60' @ 4*	
CT/ACCU FAN MTR N/A: > COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE:			60' @ 4*	
COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:	JOK: X	MISSING:	ESTIMAT			60' @ 4 *	
BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:						60' @ 4*	
PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:						60' @ 4*	
PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:						60' @ 4"	
PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A:						60' @ 4*	****
COMMENTS: HW PUMP MOTOR N/A:	JON.	јиноонио: Х	ESTIMAT	IED QUANTITY:		60' @ 4"	
HW PUMP MOTOR N/A:							
							····
	TOY Y	IDED: 10E		**************************************			
TIVE FUIVIE SEALS IIIVA.	OK: X	REPLACE:	SIZE:				
		REPLACE:	SIZE:				
HW PUMP MOTOR N/A:	OK: X	REPLACE:	SIZE:	100			
HW PUMP SEALS N/A:	OK: X	REPLACE:	SIZE:				
HW PUMP MOTOR N/A:	OK:	REPLACE:	SIZE:				
HW PUMP SEALS N/A:	OK:	REPLACE:	SIZE:				
HW PUMP MOTOR N/A:	OK:	REPLACE:	SIZE:				
HW PUMP SEALS N/A:	OK:	REPLACE:	SIZE:			·	
COMMENTS:							
CV PUMP MOTOR N/A: X	OK:	REPLACE:	SIZE:				
CV PUMP SEALS N/A: X	OK:	REPLACE:	SIZE:		-		
COMMENTS:						*	
	***	7.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5					
						· ***	
OV INSULATION N/A: X	OK:	MISSING:	ESTIMAT	ED QUANTITY:			
CV PIPE INSUL. N/A: X		MISSING:		ED QUANTITY:			
COMMENTS:	12	Importo.	LOTIMATI	LU QUANTITI.			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/14/94

PREPARED BY: AJN/CWW

23,347

BUILDING DATA SURVEY OBSERVATIONS

CONDITIONED SQFT:

BLDG NAME: INDOOR SWIM POOL BLDG NUMBER: 6940

ELECTRIC METER: N GAS METER: N

SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

LOCATION: FT. RILEY, KS

FRI: SUN: MON: TUE: WED: THUR: 0 0 PRES START: 0 0 0 0 24 24 24 24 24 24 24 PRES STOP: 11 11 11 11 11 11 REQ START: 11 20 20 20 20 20 REQ STOP:

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/14/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

	DING NUMBEI AHU NUMBEI	-		· · · · · · · ·		AHU L	OCATION	N: MER			
REFRIG SY	S # SRVNG A	HU: N	ONE		7	SERVES	S AREA:	SWIMN	AING PO	OOL	
NZI NIO O II				% (OF BLDG	AREA H					77
AHU UNIT	TYPE HEAT	ING ANI) VENTIL	ATING			NU	JMBER (OF ZON	ES IF MZ	UNIT: 0
	CFM-HTG:	-	24	1,800		CF	M-CLG:			0	
	MIN %OA:			100		MA	X %OA:			100	
NAMEPLA	\TE										
	UNIT MFG:	TEMT	ROL				UN	IT MODE	L: BD	-T31D	1
SUP	PLY FAN HP:			20			RET/EX	H FAN H	IP:		0
SUPPLY FA	N MTR MFG:	MARA	THON			RET/E	XH FAN	MTR MF	G:		
SUPPLY FAN I	MTR MODEL:	256 TT	TDR 73290	CC		RET/EXH	FAN MT	R MODE	L:		
	COMMENTS:										
COILS											
	Coil		Coil Type	•		Мо	dulating	Valve?			
	HEAT COIL:					📙					
	ATING COIL:					<u> </u>					
	EHEAT COIL: HUMIDIFIER:					— 片					
	OLING COIL:					— H					
						_					
SCHEDUL	<u>.E</u>									-	
DAY SCH	EDULE NO:	59						MONT	н ѕсн	EDULE NO	D: 1
SCHEDULE CO	OMMENTS:										
	SUN:	MON:	TUE:	WE	D: TH	UR:	FRI:	SAT:			
PRES STAR	Γ: 0	0	0		0	0	0	0			
PRES STO	P:24	24	24		24	24		24			
REQ STAR		11	11		11			11			
REQ STO	P:	20	20		20	20		20_			
MONTHS JAI	N: FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:		\boxtimes	\boxtimes						\boxtimes	\boxtimes	\boxtimes
CONTROL	.S										
יד	PE OF CONT	ROLS:	PNEUM	ATIC				OSTAT		SINGLE	SETPOINT
PRESENT	TEMP WINT	R OCC:			74			DECK D		: 	<u>0</u> 0
PRESENT TE	MP WINTR U	NOCC:			0			ED AIR D			0
PRESE	NT TEMP SUI	M OCC:			0	OTHE	R SETPO			!	<u> </u>
	TEMP SUM U				0	ОТН	IER SETI	POINT D	EG F:		0
MIN OA DM	PR CONTRO	.: N	MIX	ED All	R DMPR	CONTRO	L: Y	IMPLE	MENT	DEMAND	LIMIT CNTRLS?
MAX OA DM	PR CONTROI	<u>.</u> : 🕎	ECC	NOM	ZER DB	CONTRO	L: N				TIME CLOCK:
RET AIR DM	PR CONTROI	_: 🕎	ECO	NOM	ZER WB	CONTRO	L: N		TIME	CLOCK C	PERATIONAL?
EXH AIR DM	PR CONTROI	_: <u>Y</u>									
OTHER	CONTROLS E	ESCR:									
CON.	TROLS COM	MENTS:	HUMIDI	TY SEI	SORS (A AO NO	ID RA				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/14/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDIN	IG NUMBE	R: 694	0									
AH	IU NUMBE	R: HV-	2	· · · - · · · · · · · · · ·		AHU L	OCATIO	N: LOC	KER RM	S/STOR/	AGE	_
REFRIG SYS #	SRVNG A	HU: N	ONE			SERVES	S AREA:	LOCK	ER ROO!	MS/ STO	RAGE	
				% O	F BLDG	AREA H	EATED:				23	
AHU UNIT TY	PE HEAT	TING ANI	O VENTIL	ATING			N	UMBER (OF ZONE	S IF MZ	UNIT:	0
	CFM-HTG:			7,000			M-CLG:			0		
	MIN %OA:	· -		100		MA	X %OA:			100		
NAMEPLAT	ΓΕ											
	UNIT MFG	TEMT	ROL				N	IIT MODE	EL:			 .
SUPPL	Y FAN HP	:		5			RET/EX	(H FAN H	IP:		0	
SUPPLY FAN								MTR ME				
SUPPLY FAN MT				<u> </u>		RET/EXH	FAN M	TR MODE	EL:			
CC	OMMENTS											
COILS											· · · · · · · · · · · · · · · · · · ·	
C	oil		Coil Typ	е		Mo	dulating	Valve?				
PREH	EAT COIL:	NONE										
HEAT	ING COIL	HOT	VATER									
REH	EAT COIL:	NONE		-								
HL	MIDIFIER:	NONE										
COOL	ING COIL:	NONE										
SCHEDULE	:											
SCHEDULE DAY SCHED		59		<u>.</u>				MONT	ГН ЅСНЕ	DULE N	O:	
	ULE NO:	59						MONT	ГН ЅСНЕ	DULE N	O:	1
DAY SCHED	ULE NO:	59 MON:	TUE:	WE	D: THU	JR:	FRI:	MONT	ГН ЅСНЕ	DULE N	O:	1
DAY SCHED	ULE NO: IMENTS:		TUE:	WEI	D: THU	JR: 0	0		ГН SCHE	DULE N	O:	
DAY SCHED	ULE NO: IMENTS: SUN:	MON:	0 24	2	0			SAT: 0 24	ГН ЅСНЕ	DULE N	O:	
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START:	ULE NO: IMENTS: SUN: 0 24 11	MON: 0 24 11	0 24 11	2	0 4 1	0 24 11	0 24 11	SAT: 0 24 11	TH SCHE	DULE N	O:	
DAY SCHED SCHEDULE COM PRES START: PRES STOP:	ULE NO: IMENTS: SUN: 0 24	MON: 0 24	0 24	2	0	0 24	0 24	SAT: 0 24	ГН SCHE	DULE N	0:	
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN:	ULE NO: IMENTS: SUN: 0 24 11	MON: 0 24 11	0 24 11 20	2	0 4 1	0 24 11	0 24 11	SAT: 0 24 11	OCT:	DULE N	O:	1
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START: REQ STOP:	ULE NO: IMENTS: SUN: 0 24 11 20	MON: 0 24 11 20	0 24 11 20		0 24 1 20	0 24 11 20	0 24 11 20	SAT: 0 24 11 20				1
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON:	ULE NO: IMENTS: SUN: 0 24 11 20 FEB:	MON: 0 24 11 20	0 24 11 20 APR:		0 24 1 20 JUN:	0 24 11 20 JUL:	0 24 11 20 AUG:	SAT: 0 24 11 20 SEP:	OCT:	NOV:	DEC:	1
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON:	ULE NO: IMENTS: SUN: 0 24 11 20 FEB:	MON: 0 24 11 20 MAR:	0 24 11 20 APR:	2 1 2 MAY:	0 24 1 20 JUN:	0 24 11 20 JUL:	0 24 11 20 AUG:	SAT: 0 24 11 20 SEP:	OCT:	NOV:	DEC:	
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: CONTROLS	ULE NO: IMENTS: SUN: 0 24 11 20 FEB:	MON: 0 24 11 20 MAR:	0 24 11 20 APR: ⊠	2 1 2 MAY:	JUN:	0 24 11 20 JUL:	0 24 11 20 AUG:	SAT: 0 24 11 20 SEP:	OCT: TYPE: DEG F:	NOV:	DEC:	IT 0
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON:	ULE NO: IMENTS: SUN: 0 24 11 20 FEB:	MON:	0 24 11 20 APR: ⊠	2 1 2 MAY:	0 24 1 20 JUN:	0 24 11 20 JUL:	AUG: THERM HOT	SAT: 0 24 11 20 SEP: DMOSTAT T DECK I	OCT: TYPE: DEG F: DEG F:	NOV:	DEC:	IT 0 0
DAY SCHED SCHEDULE CON PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: Z CONTROLS TYP PRESENT TEM	ULE NO: IMENTS: SUN: 0 24 11 20 FEB: E OF CON EMP WINTR U	MON: 0 24 11 20 MAR: IR OCC: JNOCC:	0 24 11 20 APR: ⊠	2 1 2 MAY:	JUN:	0 24 11 20 JUL:	AUG: THERM HOT COLL MIX	SAT: 0 24 11 20 SEP: MOSTAT T DECK I	OCT: TYPE: DEG F: DEG F: DEG F:	NOV:	DEC:	IT 0
DAY SCHED SCHEDULE CON PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: Z CONTROLS TYP PRESENT TEM	ULE NO: IMENTS: SUN: 0 24 11 20 FEB: E OF CON EMP WINT P WINTR U	MON: 0 24 11 20 MAR: IROCS: IROCC: JNOCC:	0 24 11 20 APR: ⊠	2 1 2 MAY:	0 14 1 10 10 10 10 10 10	0 24 11 20 JUL:	AUG: THERM HOT COLE MIX R SETPO	SAT: 0 24 11 20 SEP: DMOSTAT T DECK I	OCT: TYPE: DEG F: DEG F: DEG F: SCRIP:	NOV:	DEC:	IT 0 0
DAY SCHED SCHEDULE CON PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: Z CONTROLS TYP PRESENT TEM PRESENT TEM	ULE NO: IMENTS: SUN: 0 24 11 20 FEB: E OF CON EMP WINT P WINTR U	MON: 0 24 11 20 MAR: IR OCC: JNOCC: JNOCC: JNOCC:	0 24 11 20 APR: ☑	MAY:	0	0 24 11 20 JUL:	AUG: THERM HOT COLE MIX R SETPOHER SET	SAT: 0 24 11 20 SEP: MOSTAT T DECK I D DECK I ED AIR I DINT DES	OCT: TYPE: DEG F: DEG F: DEG F: DEG F:	NOV:	DEC:	IT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: Z CONTROLS TYP PRESENT TEM PRESENT TEM PRESENT TEM	ULE NO: IMENTS: SUN: 0 24 11 20 FEB: E OF CON EMP WINT P WINTR I	MON: 0 24 11 20 MAR: IR OCC: JNOCC: JNOCC: JNOCC: L: N	0 24 11 20 APR: ☑	MAY:	75 0 0 0 0 0	OTHE	AUG: THERM HOT COLL MIX R SETPOHER SET	SAT: 0 24 11 20 SEP: MOSTAT T DECK I D DECK I ED AIR I DINT DES	OCT: TYPE: DEG F: DEG F: DEG F: DEG F:	NOV:	DEC: SETPOIN	IT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DAY SCHED SCHEDULE CON PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: Z CONTROLS TYP PRESENT TEM PRESENT TEM PRESENT TEM MIN OA DMPF	FEB: E OF CON EMP WINT P WINTR I END SUM: 111 20 FEB: C ONTRO	MON: 0 24 11 20 MAR: IROCS: IROCC: JNOCC: L: N L: Y	APR: PNEUM MIX ECC	MAY: ATIC SED AIR DNOMIZ	75 0 0 0 0 0 0 0 0 0 DMPR (OTHE OTHE CONTRO	AUG: THERM HOT COLE MIX R SETPOHER SET OL: N	SAT: 0 24 11 20 SEP: MOSTAT T DECK I D DECK I ED AIR I DINT DES	OCT: TYPE: DEG F: DEG F: SCRIP: DEG F:	NOV: SINGLE	DEC: SETPOIN	ITRLS?
DAY SCHED SCHEDULE CON PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: Z CONTROLS TYP PRESENT TEM PRESENT TEM PRESENT TEM MIN OA DMPF MAX OA DMPF	FEB: E OF CON EMP WINT P WINTE E CONTRO C CONTRO	MON: 0 24 11 20 MAR: IROCC: JNOCC: JNOCC: L: N L: Y L: Y	APR: PNEUM MIX ECC	MAY: ATIC SED AIR DNOMIZ	75 0 0 0 0 0 0 0 0 0 DMPR (OTHE OTHE CONTROCO	AUG: THERM HOT COLE MIX R SETPOHER SET OL: N	SAT: 0 24 11 20 SEP: MOSTAT T DECK I D DECK I ED AIR I DINT DES	OCT: TYPE: DEG F: DEG F: SCRIP: DEG F:	NOV: SINGLE	DEC: SETPOIN LIMIT CN TIME C	ITRLS?
DAY SCHED SCHEDULE COM PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: Z CONTROLS TYP PRESENT TEM PRESENT TEM PRESENT TEM MIN OA DMPF MAX OA DMPF RET AIR DMPF	FEB: E OF CON EMP WINT P WINTR I CONTRO C CONTRO C CONTRO	MON: 0 24 11 20 MAR: KROCC: JNOCC: JNOCC: L: N L: Y L: Y L: Y	APR: PNEUM MIX ECC	MAY: ATIC SED AIR DNOMIZ	75 0 0 0 0 0 0 0 0 0 DMPR (OTHE OTHE CONTROCO	AUG: THERM HOT COLE MIX R SETPOHER SET OL: N	SAT: 0 24 11 20 SEP: MOSTAT T DECK I D DECK I ED AIR I DINT DES	OCT: TYPE: DEG F: DEG F: SCRIP: DEG F:	NOV: SINGLE	DEC: SETPOIN LIMIT CN TIME C	ITRLS?

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE:** 10/14/94

PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER:	6940			BOILER RM LC	CATION:	MER	
BOILER UNIT							
SOURCE OF BLDG H	EAT	BLR/CONVERTE	R SERVES ARE	EA OR SERVICI	E: ALL		
BOILER TAG:	BLR-1			ONVERTER TAG	-		
BOILER TYPE:	DEIC			VERTER TAG: ERTER TYPE:			
FUEL TYPE:				HT SOURCE:			
CENTRAL PLANT	DIRECT						
NAMEPLATE			% AREA HE	ATED BY BB R	ADIATION:		0
BOILER MFG: OSAGE			BLR CA	AP OUTPUT (B1	UH):	2,240,0	00
UNIT MODEL: 3-5-350				CAP INPUT (BT		2,800,0	
COMMENTS:							
SCHEDULE							
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	59			MON	TH SECHD	ULE NO:	1
PRES START: 0 PRES STOP: 24 REQ START: 11 REQ STOP: 20	0 24 11	TUE: WED 0 24 21 11 20 20	0 0 0 4 24 1 11	FRI: SAT: 0 24 11 20 20			
MONTHS JAN: FEB: ON:	MAR:	APR: MAY:	JUN: JUL:	AUG: SEP:	ост: <u> </u>	NOV: DEC:	
CONTROLS							•
TYPE OF BLR CO OPERATING SE TYPE OF BURNER CO	TPOINT:	ELECTRIC 0 D	DEG F or PSIG	RESI	ET CONTR	OLS: Y	
CONTROLS COM	MENTS:						
IW PUMP							
PUMP TAG: 1 PUMP SERVICE: HW PUM	1P	PUMP HP:	2	PUMP MOD	-		
PUMP TAG: 2 PUMP SERVICE: HW PUM	îP	PUMP HP:	1	PUMP M	-	. & GOSSETT	The state of the s

$\boldsymbol{\mathsf{E}}\ \boldsymbol{\mathsf{M}}\ \boldsymbol{\mathsf{C}}$ Engineers, inc.

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

6940

FILE:

6940.XLS

AHU NO.:	AHU-1	LOCATIO	S UNIT - HVAC UNIT - MER					
AHU TYPE:	SZ	MFG.:	TEMTROL		MODEL:	BZ-T31D		
SZ - Single Zone		ating & Vntltng		an Coil (Indicate			2)	
//Z - Mulitzone	I	iable Air Vol.	,	Reheat System	21 101 2 1 1pc 01	-1 101 -1 1pc	' 1	
DD - Dual Duct	UH - Unit			nduction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	*
. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	-
ONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:		RS LOOK O	K, BUT STUCK OPEN.	I			DPR-ACT = Damp	er Actuator
			D IN FAR WALL OF PC	OL AREA (2@	6' X 3')	· · · · · · · · · · · · · · · · · · ·	RP-ACT = Replace	
	OPEN ~20				······ ′-···			
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:				<u> </u>				
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
NLET VANES	N/A: X	OK:	COMMENTS:	1				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	NTS:	N/A		
				COMMEN				
RETURN FAN MOTOR	1K 3K .	IREPLACE						
RETURN FAN MOTOR	OK:	REPLACE		COMME	VIO.	<u> </u>		
		METER IN A		COMME	V13.			
				COMME	NIO.			
COMMENTS:	HUMIDITY	METER IN A	AHU-1 BOX			IIOK:	IRP- ACT:	IRP-BD:
COMMENTS:	HUMIDITY	METER IN A	AHU-1 BOX	SIZĖ:	CNTLVLV	OK:	RP- ACT:	
COOLING COIL HEATING COIL	N/A: X N/A:	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	HUMIDITY	METER IN A	AHU-1 BOX	SIZĖ:	CNTLVLV	11		RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZĖ: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL	N/A: X N/A: N/A: N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZĖ: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZĖ: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZĖ: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: X N/A: N/A: N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZĖ: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: N/A: N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace 6	RP-BD: RP-BD:
COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD:
COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X N/A: X N/A: X N/A: X N/A: X	OK: OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace 6	RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

6940

FILE:

6940.XLS

	AIR	HANDLIN	IG UNIT - HVAC	JPGRADE	OBSERVA [*]	TIONS		
AHU NO.:	AHU-2	LOCATIO	N (Rm) MER C	EILING MOUNT	rED			
AHU TYPE:	SZ	MFG.:	TEMTROL		MODEL:	106		
SZ - Single Zone	H&V - He	ating & Vntltn	g. ¡FC - F	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe)	
MZ - Mulitzone	VAV - Vai	riable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - I	nduction System	1			
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	MISSING	RP- ACT:	Х
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
ONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
		****					RP-ACT = Replace	e Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	lok:	[REPLACE	FAN BEARINGS: X	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
NLET VANES	N/A: X	IOK:	COMMENTS:	1				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	NTS:	N/A	····	· · · · · · · · · · · · · · · · · · ·
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:		11.01.01.01		Joonnie	110.	10/1		
JOHNELLI O.			·					
COOLING COIL	Inva. v	lov	IDEDI AGE	Total	TONTI VILV	Nov	100 107	Jon on
HEATING COIL	N/A: X N/A:	OK: OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:][V/A: /\	1011.	INCI DAGE.	JOIZE.	CIVIEVEV	Jon.		
JOIVINILIATS.	*****						RP-ACT = Replace	
				*****			RP-BD = Repface	Body
HU PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:				
AHU PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:						*****		
PIPE INSULATION	N/A:	OK: X	MISSING:		ED QUANTITY:			
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			
COMMENTS:								
·								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

6940 FILE: 6940.XLS

HW - Hot Water HTHW BOILER BURNER ATMO COMMENTS: SOME GOOD BLR PUMP MOTOR N/A: > BLR PUMP SEALS N/A: > COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:	SPHERIC: RUST ON TOP CONDITION (OK:	p. HW to HW Cv.	MER RIOR MODEL: 3-5-350 MODEL: HTHW/STM - High Temp HW to Steam Convertor DHW - Domestic Hot Water Convertor OK: X REPLACE: OTHERWISE IT LOOKS TO BE IN SIZE: SIZE: SIZE: ESTIMATED QUANTITY: ESTIMATED QUANTITY: 15' OF 4"	
CONVERTER TYPE: STM - Steam STM/F HW - Hot Water HTHW BOILER BURNER ATMO COMMENTS: SOME BLR PUMP MOTOR N/A:) BLR PUMP SEALS N/A:) COMMENTS: BLR INSULATION N/A:) COMMENTS: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A:	IW - Steam to Ho //HW - High Tem SPHERIC: RUST ON TOP CONDITION OCONDITION OK: OK:	MFG.: ot Water Conv. p. HW to HW Cv. POWER: X OF BOILER CASING; C REPLACE: REPLACE:	MODEL: HTHW/STM - High Temp HW to Steam Convertor DHW - Domestic Hot Water Convertor OK: X REPLACE: DTHERWISE IT LOOKS TO BE IN SIZE: SIZE: SIZE: ESTIMATED QUANTITY:	
STM - Steam STM/F HW - Hot Water HTHW BOILER BURNER ATMO COMMENTS: SOME GOOD BLR PUMP MOTOR N/A: N/A: N BLR PUMP SEALS N/A: N/A: N PIPE INSULATION N/A: COMMENTS: N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A	//HW - High Tem SPHERIC: RUST ON TOP CONDITION (OK: (OK:	ot Water Conv. p. HW to HW Cv. POWER: X OF BOILER CASING; C REPLACE: REPLACE: MISSING:	HTHW/STM - High Temp HW to Steam Convertor DHW - Domestic Hot Water Convertor OK: X REPLACE: DTHERWISE IT LOOKS TO BE IN SIZE: SIZE: SIZE: SIZE:	
HW - Hot Water HTHW BOILER BURNER ATMO COMMENTS: SOME GOOD BLR PUMP MOTOR N/A: > BLR PUMP SEALS N/A: > COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:	//HW - High Tem SPHERIC: RUST ON TOP CONDITION (OK: (OK:	p. HW to HW Cv. POWER: X OF BOILER CASING; C REPLACE: REPLACE: MISSING:	DHW - Domestic Hot Water Convertor OK: X REPLACE: DTHERWISE IT LOOKS TO BE IN SIZE: SIZE: SIZE: ESTIMATED QUANTITY:	
BOILER BURNER ATMO COMMENTS: SOME GOOD BLR PUMP MOTOR N/A: > BLR PUMP SEALS N/A: > COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:	SPHERIC: RUST ON TOP CONDITION CONDITION COK: COK:	POWER: X OF BOILER CASING; C REPLACE: REPLACE: MISSING:	OK: X REPLACE: OTHERWISE IT LOOKS TO BE IN SIZE: SIZE: SIZE: [ESTIMATED QUANTITY:	
BLR PUMP MOTOR BLR PUMP SEALS COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: N/A:	RUST ON TOP CONDITION CONDITION CONC. CO	OF BOILER CASING; C	SIZE: SIZE: ESTIMATED QUANTITY:	
BLR PUMP MOTOR BLR PUMP SEALS COMMENTS: BLR INSULATION PIPE INSULATION COMMENTS: HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:	CONDITION CONDITION COK: COK: COK:	REPLACE: REPLACE: MISSING:	SIZE: SIZE: SIZE:	
BLR PUMP MOTOR N/A: > BLR PUMP SEALS N/A: > COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A:	OK: X	REPLACE: MISSING:	SIZE: ESTIMATED QUANTITY:	
BLR PUMP SEALS COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE: ESTIMATED QUANTITY:	
BLR PUMP SEALS COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE: ESTIMATED QUANTITY:	
BLR PUMP SEALS COMMENTS: BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:	OK: X	REPLACE: MISSING:	SIZE: ESTIMATED QUANTITY:	-
BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
BLR INSULATION N/A: PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A:				
PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A:				
PIPE INSULATION N/A: COMMENTS: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A:				
HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A:	јок:	MISSING: X	ESTIMATED QUANTITY: 15' OF 4"	
HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP SEALS N/A:				
HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A:				
HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A:				
HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A:				
HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP SEALS N/A: HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A:	OK: X	REPLACE:	SIZE:	
HW PUMP MOTOR N/A: HW PUMP SEALS N/A: HW PUMP MOTOR N/A:	OK:	REPLACE:	SIZE:	
HW PUMP SEALS N/A: HW PUMP MOTOR N/A:	OK:	REPLACE:	SIZE:	
HW PUMP MOTOR N/A:	OK:	REPLACE:	SIZE:	
II	OK:	REPLACE:	SIZE:	
THE PARTY OF THE P	OK:	REPLACE:	SIZE:	
HW PUMP SEALS N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:				
1614 ·	/ Toy/	IDEDI ACE	[0]77.	
CV PUMP MOTOR N/A:)		REPLACE:	SIZE:	
CV PUMP SEALS N/A:)	V JUK:	INEPLACE:	JOILE.	
COMMENTS:				
CV INSULATION N/A:)	K JOK:	MISSING:	ESTIMATED QUANTITY:	
CV PIPE INSUL. N/A:)		MISSING:	ESTIMATED QUANTITY:	
COMMENTS:		1		
OOMINEIVIO.				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JMAJN.AMS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 8069

BLDG NAME: IN SW POOL/GYM

ELECTRIC METER: N

CONDITIONED SQFT:

GAS METER: N

SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 58

SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 **REQ START:** 9 6 6 6 12 6 9 REQ STOP: 20 22 22 22 22 20

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: DACA 01-94-D-0033

DATE: 10/12/94
PREPARED BY: JMAJN.AMS

		<u> </u>	
BUILDING NUMBER			
AHU NUMBER	R: AHU-1	AHU LOCATION:	MER
REFRIG SYS # SRVNG AF		SERVES AREA: OG AREA HEATED:	EXERCISE ROOM 9
AHU UNIT TYPE SINGL	E ZONE	NUI	MBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	5,190	CFM-CLG:	5,190
MIN %OA: NAMEPLATE	5	MAX %OA:	100
UNIT MFG:	CENTRAL AIRE	215117	MODEL : 14040
SUPPLY FAN HP:	CENTRAL AIRE		MODEL: <u>L1016</u> 0
SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN N	
SUPPLY FAN MTR MODEL:	6-322466-02	RET/EXH FAN MTF	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating V	/alve?
PREHEAT COIL:	NONE		
HEATING COIL:	HOT WATER		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
DAY SCHEDULE NO:	54		MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED: T	HUR: FRI: S	AT:
PRES START: 0	0 0 0	0 0	0
PRES STOP: 24	24 24 24	24 24	
REQ START: 10	9 9 9	9 9	9
REQ STOP: 19	21 21 21	21 21	21
	MAR: APR: MAY: JUN:	: JUL: AUG:	SEP: OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC		OSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC: 0		DECK DEG F: 0
PRESENT TEMP WINTR UI	NOCC: 0		DECK DEG F: 0 D AIR DEG F: 0
PRESENT TEMP SUN	OCC: 0	OTHER SETPOI	
PRESENT TEMP SUM UI		OTHER SETP	
MIN OA DMPR CONTROL	: N MIXED AIR DMP	R CONTROL: N	IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL	: Y ECONOMIZER DE	B CONTROL: N	TIME CLOCK: N
RET AIR DMPR CONTROL	: Y ECONOMIZER WE	B CONTROL: N	TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL	=	<u> </u>	
OTHER CONTROLS D CONTROLS COMM			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: JMAJN.AMS

AIR HANDLING UNIT SURVEY OBSERVATIONS

		G NUMBI					ALUIT	OCATI	ON: ME				
			L				Anui	_OCATI					
REFR	RIG SYS #	SRVNG	AHU: C	ENTRAL		DF BL/DO	SERVE G AREA	S AREA		QUETBA	LL COUR	TS 4	
AHU	UNIT TY	PE SINC	SLE ZON	E			· · · · ·	· · · · ·	NUMBER	OF ZON	NES IF MZ	Z UNIT: 0]
	-	CFM-HTG	: [2,125		С	FM-CLO	3:		2,125		_
		MIN %OA	:		5			AX %O/	<u> </u>		100		
NAME	PLAT	Έ											
	Ų	INIT MFG	: CENT	RAL AIRE				ι	INIT MOD	EL: LO	613		
eupp		FAN HP		711537	1.5				XH FAN			0	
		MTR MFG R MODEL							N MTR M ATR MOD	===			
		MMENTS		07702			NE I/EXI	TAN	IT K NIOD	EL:			
COILS													
	Co	il		Coil Typ	e		Мо	dulatin	g Valve?				
	PREH	AT COIL	NONE										
	HEAT	NG COIL	HOT	VATER									
		AT COIL					🛚						
		MIDIFIER: NG COIL:					🖂						
COUL		NG COIL.					🗠						
SCHE	JULE				····								
DAY	SCHEDU	ILE NO:	54						MON	TH SCH	EDULE N	0: 3	
SCHEDU	ILE COMI	MENTS:											
		SUN:	MON:	TUE:	WEI	D: TH	UR:	FRI:	SAT:				
PRES S		0	0	0		0	0	0	0				
	STOP:	24	24	24	2	4 ===	24	24	24				
	START: STOP:	10 19	9 21	9 21	=======================================	9	9 21	9 21	<u>9</u> 21				
							21	21					
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY:	JUN:					NOV	DEC:	
						••••	JUL:	AUG:	SEP:	OCT:	NOV:		
——————————————————————————————————————	\boxtimes	\boxtimes	⊠	\boxtimes			JUL:	AUG:	SEP:	OCT:	NOV:		
CONTE				⊠									
	ROLS	OF CONT	☒	PNEUM				THER	⊠ MOSTAT	TYPE:	×		
CONTR	ROLS		ROLS:					THER HO	MOSTAT	TYPE: DEG F:	×	SETPOINT 0	
CONTE	TYPE	OF CON	ROLS:					THER HO COL	MOSTAT T DECK [TYPE: DEG F: DEG F:	×	SETPOINT 0 0	
PRE PRESE	TYPE SENT TE NT TEMP	OF CONT	ROLS:			0		THER HO COL	MOSTAT T DECK [D DECK [KED AIR [TYPE: DEG F: DEG F:	×	SETPOINT 0	
PRE PRESE	TYPE SENT TEMP RESENT T	OF CONT	ROLS: ROCC:			0 0	OTHE	THER HO COL MI) R SETP	MOSTAT T DECK [TYPE: DEG F: DEG F: DEG F:	×	SETPOINT 0 0	
PRE PRESE	TYPE SENT TE NT TEMP RESENT TEM SENT TEM	OF CONT MP WINTI WINTR U	FROLS: R OCC: NOCC: NOCC:	PNEUMA	ATIC	0 0 0	OTHE	THER HO COL MIX R SETP	MOSTAT T DECK I D DECK I KED AIR I OINT DES	TYPE: DEG F: DEG F: DEG F: SCRIP: DEG F:	SINGLE	SETPOINT 0 0 0 0	2 [N]
PRE PRESE	TYPE SENT TE NT TEMP RESENT TE SENT TEM A DMPR	OF CONT MP WINTI WINTR U IEMP SUI IP SUM U	FROLS: R OCC: NOCC: NOCC:	PNEUMA	ATIC ED AIR	0 0 0 0	OTHE OTH	THER HO COL MI) R SETP HER SET	MOSTAT T DECK I D DECK I KED AIR I OINT DES	TYPE: DEG F: DEG F: DEG F: SCRIP: DEG F:	SINGLE	SETPOINT 0 0 0 0 LIMIT CNTRLS	
PRE PRESE MIN O. MAX O.	TYPE SENT TE NT TEMP RESENT TE SENT TEM A DMPR	OF CONT MP WINTI WINTR U TEMP SUI IP SUM U	TROLS: R OCC: NOCC: NOCC: NOCC: INOCC: PNEUM/	ATIC ED AIR NOMIZ	0 0 0 0 0	OTHE OTH	THER HO COL MI) R SETP HER SE	MOSTAT T DECK I D DECK I KED AIR I OINT DES	TYPE: DEG F: DEG F: DEG F: DEG F: SCRIP: DEG F:	SINGLE	SETPOINT 0 0 0 0	: <u>N</u>	
PRE PRESE MIN O. MAX O. RET All	TYPE SENT TE NT TEMP RESENT TEM SENT TEM A DMPR (R DMPR (OF CONT MP WINTI WINTR U TEMP SUI IP SUM U CONTROI	FROLS: R OCC: NOCC: NOCC: NOCC: INOCC: PNEUM/	ATIC ED AIR NOMIZ	0 0 0 0 0	OTHE OTH CONTROCONTRO	THER HO COL MI) R SETP HER SE	MOSTAT T DECK I D DECK I KED AIR I OINT DES	TYPE: DEG F: DEG F: DEG F: DEG F: SCRIP: DEG F:	SINGLE	SETPOINT 0 0 0 0 LIMIT CNTRLS	: <u>N</u>	

CONTROLS COMMENTS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JMAJN.AMS

7 13				<u> </u>							
BUILDING N AHU N	IUMBER:				АНІ	J LOCATI	ON: BAS	KETBALL	. GYM		
REFRIG SYS # SR	VNG AH	U: NO	NE		SER	VES AREA	A: BASKE	TBALL C	SYM		
		<u></u>		% OF B	LDG ARE	A HEATE	D:			10	
AHU UNIT TYPE	HEATII	NG AND	VENTILA	TING	_		NUMBER (OF ZONE	S IF MZ	UNIT:	<u> </u>
CFI	M-HTG:		6	750		CFM-CLC	3:		0		
MIM	1 %OA:			20		MAX %O	A:		100		
NAMEPLATE											
	T MFG:	:					JNIT MODE	L: L14	20	:	···
SUPPLY F	AN HP:			3		RET/I	EXH FAN H	IP:	,	0	
SUPPLY FAN MTI	R MFG:	CENTU	JRY		RE	T/EXH FA	N MTR MF	G:			
SUPPLY FAN MTR N	ODEL:	6-3224	66-02		RET/I	EXH FAN I	MTR MODE	L:			
COMM	MENTS:										
COILS											
Coil			Coil Type	•		Modulati	ng Valve?				
PREHEA.	T COIL:	NONE									
HEATING						\boxtimes					
REHEA"	T COIL:	NONE									
HUMII	DIFIER:	NONE									
COOLING	G COIL:	NONE									
SCHEDULE											
	- 110		·····				MON	ru ecur	DULE N	<u> </u>	ī
DAY SCHEDULI SCHEDULE COMME	==	54					IVIOIN	IN SCHE	DOLE IV	J	=
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START:	0	0	0	0 24	24	<u>0</u> 24	<u>0</u> 24				
PRES STOP:	24 10	24	== <u>24</u> 9	9	9	9	9				
REQ STOP:	19	21	21	21	21	21	21				
NEQ 5101:	15										
	FEB:	MAR:	APR:	MAY: J	UN: JU	L: AUG	E: SEP:	OCT:	NOV:	DEC:	
ON:	\boxtimes	\boxtimes	\boxtimes					\times	\boxtimes	\boxtimes	
CONTROLS											
TYPE C	F CONT	ROLS:	PNEUM	ATIC	!		RMOSTAT		SINGLE	SETPOINT	
PRESENT TEM	P WINTE	R OCC:			0		OT DECK			0	
PRESENT TEMP V	VINTR U	NOCC:			0		LD DECK			0	
							NIXED AIR I POINT DE			0	
PRESENT TEMP					0 0		ETPOINT [0	
MIN OA DMPR C	ONTROL	: N	MIX	ED AIR D	MPR CON	trol: Γ	N IMPLI	EMENT I	DEMAND	LIMIT CNTI	RLS? N
MAX OA DMPR C					R DB CON	==	N			TIME CL	
RET AIR DMPR C					NB CON	==	N	TIME	CLOCK	OPERATION	NAL? N
EXH AIR DMPR C	ONTROL	.: N									
OTHER CONT	rols D	ESCR:									
=	C COMM					·					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JMAJN.AMS

	8069		
AHU NUMBER:	HV-2	AHU LOCATION: BASKETBA	LL GYM
REFRIG SYS # SRVNG AHU:	: NONE	SERVES AREA: BASKETBALL	. GYM
	% OF BLDG	S AREA HEATED:	10
AHU UNIT TYPE HEATING	S AND VENTILATING	NUMBER OF ZON	NES IF MZ UNIT: 0
CFM-HTG:	6,750	CFM-CLG:	0
MIN %OA:	20	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODEL: L1	1420
SUPPLY FAN HP:	3	RET/EXH FAN HP:	0
=	ENTURY	RET/EXH FAN MTR MFG:	
-	-322466-02	RET/EXH FAN MTR MODEL:	
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: N	IONE		
HEATING COIL: H	IOT WATER		
-	IONE	_	
	IONE	님	
COOLING COIL: N	IONE	L	
SCHEDULE			
DAY SCHEDULE NO:	54	MONTH SCH	IEDULE NO: 1
SCHEDULE COMMENTS:			
SUN: M	ION: TUE: WED: TH	UR: FRI: SAT:	
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 10	9 9 9	9 9 9	
REQ STOP: 19	21 21 21	21 21 21.	
MONTHS JAN: FEB: MA	AR: APR: MAY: JUN:	JUL: AUG: SEP: OCT	: NOV: DEC:
ON: ☑ ☑ ☑			
CONTROLS			
TYPE OF CONTRO	DLS: PNEUMATIC	THERMOSTAT TYPE:	SINGLE SETPOINT
TIPE OF CONTRO	<u> </u>		
=	occ: 0	HOT DECK DEG F:	0
PRESENT TEMP WINTR O		COLD DECK DEG F:	0
PRESENT TEMP WINTR O	OCC: 0	COLD DECK DEG F: MIXED AIR DEG F:	0
PRESENT TEMP WINTR O	OCC: 0	COLD DECK DEG F:	0
PRESENT TEMP WINTR O PRESENT TEMP WINTR UNO PRESENT TEMP SUM O PRESENT TEMP SUM UNO	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	0 0
PRESENT TEMP WINTR OF PRESENT TEMP WINTR UNO PRESENT TEMP SUM UNO MIN OA DMPR CONTROL:	DCC: 0 DCC: 0 DCC: 0 N MIXED AIR DMPR	COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: CONTROL: N IMPLEMENT	0 0 0 DEMAND LIMIT CNTRLS?
PRESENT TEMP WINTR OF PRESENT TEMP WINTR UND PRESENT TEMP SUM UND MIN OA DMPR CONTROL:	DCC: 0 DCC: 0 DCC: 0 N MIXED AIR DMPR Y ECONOMIZER DB	COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: CONTROL: N IMPLEMENT CONTROL: N	0 0 0 DEMAND LIMIT CNTRLS? N TIME CLOCK: Y
PRESENT TEMP WINTR OF PRESENT TEMP WINTR UNO PRESENT TEMP SUM UNO MIN OA DMPR CONTROL:	DCC: 0 DCC: 0 DCC: 0 N MIXED AIR DMPR	COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: CONTROL: N IMPLEMENT CONTROL: N	0 0 0 DEMAND LIMIT CNTRLS?

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

DATE: 10/12/94

CLIENT CONTRACT NO: DACA 01-94-D-0033 LOCATION: FT. RILEY, KS

PREPARED BY: JMAJN.AMS

BUILDING NUMBEI AHU NUMBEI		AHU LOCATION: BASK	ETBALL GYM
REFRIG SYS # SRVNG A		SERVES AREA: BASKET	TBALL GYM
AHU UNIT TYPE HEAT	ING AND VENTILATING	NUMBER O	F ZONES IF MZ UNIT: 0
CFM-HTG: MIN %OA:	6,750 20	CFM-CLG: MAX %OA:	0 100
NAMEPLATE			
UNIT MFG: SUPPLY FAN HP: SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL: COMMENTS:	3 CENTURY B-322466-02	UNIT MODEL RET/EXH FAN HP RET/EXH FAN MTR MFG RET/EXH FAN MTR MODEL	2: 0 3:
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL: HEATING COIL: REHEAT COIL: HUMIDIFIER: COOLING COIL: SCHEDULE	HOT WATER NONE NONE		
DAY SCHEDULE NO: SCHEDULE COMMENTS:	54	MONTH	SCHEDULE NO: 1
PRES START: 0 PRES STOP: 24 REQ START: 10 REQ STOP: 19	MON: TUE: WED: TH 0 0 0 0 24 24 24 24 9 9 9 9 21 21 21 21	HUR: FRI: SAT: 0 0 0 0 24 24 24 9 9 9 21 21 21	
MONTHS JAN: FEB: ON:	MAR: APR: MAY: JUN:	JUL: AUG: SEP:	OCT: NOV: DEC:
CONTROLS			
TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP SUN PRESENT TEMP SUN PRESENT TEMP SUM UI MIN OA DMPR CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL	OCC:	CONTROL: N	G F: 0 G F: 0 G F: 0

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94
PREPARED BY: JMAJN.AMS

7 (11 (1 1)		CONTRACT OF			
BUILDING NUMBER	: 8069				
AHU NUMBER	: HV-4	AHU LOCATION	: BASKETBAL	L GYM	
REFRIG SYS # SRVNG AH	IU: NONE	SERVES AREA:	BASKETBALL	GYM	-
		BLDG AREA HEATED:		11	0
AHU UNIT TYPE HEATII	NG AND VENTILATING	NU	MBER OF ZON	ES IF MZ UNIT:	0
CFM-HTG:	6,750	CFM-CLG:		0	
MIN %OA:	20	MAX %OA:		100	
NAMEPLATE					
UNIT MFG:		UNI	T MODEL: L14	120	
SUPPLY FAN HP:	3.		FAN HP:	0	
SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN !	MTR MFG:		
SUPPLY FAN MTR MODEL:	6-322466-02	RET/EXH FAN MTI	R MODEL:		
COMMENTS:					
COILS					
Coil	Coil Type	Modulating \	/alve?		
PREHEAT COIL:	NONE				
HEATING COIL:		<u>\</u>			
REHEAT COIL:	NONE				
HUMIDIFIER:	NONE				
COOLING COIL:	NONE				
SCHEDULE		•			
DAY SCHEDULE NO:	54		MONTH SCH	EDULE NO:	1
SCHEDULE COMMENTS:					<u>.</u>
CHAL	MON: THE MED	TUID. EDI. 6	SAT:		
PRES START: 0	MON: TUE: WED:	THUR: FRI: \$	O		
PRES START: 0 PRES STOP: 24	0 0 0	24 24	24		
REQ START: 10	9 9 9	9 9	9		
REQ STOP: 19	21 21 21	21 21	<u> </u>		
NEWOTOT					
MONTHS JAN: FEB: M	MAR: APR: MAY: J	UN: JUL: AUG:	SEP: OCT:	NOV: DEC:	 :
				\boxtimes	
CONTROLS					
TYPE OF CONT	ROLS: PNEUMATIC		OSTAT TYPE:	SINGLE SETPO	INT
PRESENT TEMP WINTR	OCC:	D'	DECK DEG F:	<u></u>	0
PRESENT TEMP WINTR UN		COLD	DECK DEG F:		0
		- MIXE	D AIR DEG F:		0
PRESENT TEMP SUM PRESENT TEMP SUM UI		OTHER SETPO OTHER SETF	OINT DESCRIP:		0
MIN OA DMPR CONTROL	: N MIXED AIR DI	MPR CONTROL: N	IMPLEMENT	DEMAND LIMIT C	NTRLS? N
MAX OA DMPR CONTROL		DB CONTROL: N			CLOCK: Y
RET AIR DMPR CONTROL	 	WB CONTROL: N	TIME	CLOCK OPERA	<u> </u>
EXH AIR DMPR CONTROL	=				
OTHER CONTROLS D					
CONTROLS COMM	ENTS:				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

CONTROLS COMMENTS:

EMC NO: 1406-001 **DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JMAJN.AMS

	BUILDING NUMBER	: 8069		
	AHU NUMBER	<u></u>	AHU LOCATION: SWIMMING POOL	
	REFRIG SYS # SRVNG AF	IU: NONE	SERVES AREA: SWIMMING POOL	
	REPRICE OF OR WING AT	10. 110112	% OF BLDG AREA HEATED: 7	
	AHU UNIT TYPE HEATI	NG AND VENTILA	ATING NUMBER OF ZONES IF MZ UNIT: 0	
•	CFM-HTG:	4	4,500 CFM-CLG: 0	
	MIN %OA:		50 MAX %OA: 100	
N	IAMEPLATE	,		
	UNIT MFG:	CENTRAL AIRE	UNIT MODEL: L1016	
	SUPPLY FAN HP:		2 RET/EXH FAN HP:	
	SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN MTR MFG:	
	SUPPLY FAN MTR MODEL:	8-33-1262-03	RET/EXH FAN MTR MODEL:	
	COMMENTS:			
C	OILS			
	Coil	Coil Type	e Modulating Valve?	
	PREHEAT COIL:	NONE		
	HEATING COIL:		<u> </u>	
	REHEAT COIL:	NONE		
	HUMIDIFIER:	NONE		
	COOLING COIL:	NONE		
S	CHEDULE			
_				
	DAY COUEDING NO.		MONTH COUEDINE NO. 4	
	DAY SCHEDULE NO:	58	MONTH SCHEDULE NO: 1	
	SCHEDULE COMMENTS:			
	SCHEDULE COMMENTS:	MON: TUE:	WED: THUR: FRI: SAT:	
_	SCHEDULE COMMENTS: SUN: PRES START: 0	MON: TUE: 0 0	WED: THUR: FRI: SAT: 0 0 0 0 0	
	SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE: 0 0 24 24	WED: THUR: FRI: SAT: 0 0 0 0 0 24 24 24 24 24	
	SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 24	MON: TUE: 0 0	WED: THUR: FRI: SAT: 0 0 0 0 0 24 24 24 24 6 12 6 9	
	SCHEDULE COMMENTS: SUN:	MON: TUE: 0 0 24 24 6 6	WED: THUR: FRI: SAT: 0 0 0 0 0 24 24 24 24 6 12 6 9	
	SCHEDULE COMMENTS: SUN:	MON: TUE: 0 0 24 24 6 6 22 22	WED: THUR: FRI: SAT: 0 0 0 0 24 24 24 24 6 12 6 9 22 22 22 20 MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
	SCHEDULE COMMENTS: SUN:	MON: TUE: 0 0 24 24 6 6 22 22	WED: THUR: FRI: SAT: 0 0 0 0 24 24 24 24 6 12 6 9 22 22 22 20	
	SCHEDULE COMMENTS: SUN:	MON: TUE: 0 0 24 24 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT: 0 0 0 0 24 24 24 24 6 12 6 9 22 22 22 20 MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: ON: ON:	MON: TUE: 0 0 24 24 6 6 22 22 MAR: APR: □	WED: THUR: FRI: SAT: 0 0 0 0 24 24 24 24 6 12 6 9 22 22 22 20 MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PREQ START: PREQ START: PREQ STOP: PREQ	MON: TUE: 0 0 24 24 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: ON: ON: CONTROLS	MON: TUE: 0 0 24 24 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ START: ON: ON: TYPE OF CONT PRESENT TEMP WINTE UP	MON: TUE: 0 0 24 24 6 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PREQ START: PREQ STOP: PREQ STOP: PRES START: PRES STOP: PRES STOP: PRES START: PRES STOP: PRES START: PRES STOP: PRE	MON: TUE: 0 0 24 24 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: NON: SONTROLS TYPE OF CONT PRESENT TEMP WINTE UN PRESENT TEMP SUM UM	MON: TUE: 0 0 24 24 6 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: 24 REQ START: 9 REQ STOP: 20 MONTHS JAN: FEB: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE UI PRESENT TEMP SUM UI MIN OA DMPR CONTROL	MON: TUE: 0 0 24 24 6 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	=
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: NON: SONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM UNITED SUM PRESENT TEMP SUM P	MON: TUE: 0 0 24 24 6 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: PREQ STOP: ON: CONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM UNITE OF CONTROL MIN OA DMPR CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL	MON: TUE: 0 0 24 24 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	
	SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: NON: SONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM UNITED SUM PRESENT TEMP SUM P	MON: TUE: 0 0 24 24 6 6 6 22 22 MAR: APR: I	WED: THUR: FRI: SAT:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94 PREPARED BY: JMAJN.AMS

BUILDING NUMBER: 8069 AHU NUMBER: HV-6	AHU LOCATION: SWIMMING POOL
REFRIG SYS # SRVNG AHU: NONE	SERVES AREA: SWIMMING POOL
	LDG AREA HEATED: 7
AHU UNIT TYPE HEATING AND VENTILATING	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: 4,500	CFM-CLG: 0
MIN %OA: 50	MAX %OA: 100
NAMEPLATE	
UNIT MFG: CENTRAL AIRE	UNIT MODEL: L1016
SUPPLY FAN HP: 2	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: CENTURY	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: 8-33-1262-03	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	🗵
REHEAT COIL: NONE	
HUMIDIFIER: NONE	
COOLING COIL: NONE	L
SCHEDULE	
DAY SCHEDULE NO: 58	MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:	
SUN: MON: TUE: WED:	THUR: FRI: SAT:
PRES START:000	0 0 0
PRES STOP: 24 24 24 24	24 24 24
REQ START: 9 6 6 6	12 6 9
REQ STOP:	22 20
MONTHS JAN: FEB: MAR: APR: MAY: JUI	
MONTHS JAN: FEB: MAR: APR: MAY: JUI ON:	N: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	N: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	N: JUL: AUG: SEP: OCT: NOV: DEC:
ON: ONTROLS TYPE OF CONTROLS: PNEUMATIC	N: JUL: AUG: SEP: OCT: NOV: DEC:
ON: ONTROLS TYPE OF CONTROLS: PNEUMATIC	N: JUL: AUG: SEP: OCT: NOV: DEC: THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F: 0
ON: ON: ON: ON: ON: ON: ON: ON:	N: JUL: AUG: SEP: OCT: NOV: DEC: THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: 0
ON: ON: ON: ON: ON: ON: ON: ON:	N: JUL: AUG: SEP: OCT: NOV: DEC: THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F: 0
ON: ON: ON: ON: ON: ON: ON: ON:	N: JUL: AUG: SEP: OCT: NOV: DEC: THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F: OMIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: OTHER SETPOINT DEG F:
ON: CONTROLS TYPE OF CONTROLS: PNEUMATIC PRESENT TEMP WINTR OCC: PRESENT TEMP WINTR UNOCC: O PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: O	N: JUL: AUG: SEP: OCT: NOV: DEC: THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F: 0 PR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
ON: ON: ON: ON: ON: ON: ON: ON:	N: JUL: AUG: SEP: OCT: NOV: DEC: THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0 OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: 0 PR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N DB CONTROL: N TIME CLOCK: Y
ON: ON: ON: ON: ON: ON: ON: ON:	N: JUL: AUG: SEP: OCT: NOV: DEC: THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0 OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: 0 PR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N DB CONTROL: N TIME CLOCK: Y
ON: ON: ON: ON: ON: ON: ON: ON:	N: JUL: AUG: SEP: OCT: NOV: DEC: THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0 OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: 0 PR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N DB CONTROL: N TIME CLOCK: Y

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94 PREPARED BY: JMAJN.AMS

BUILDING NUMBER		
AHU NUMBEI	R: HV-7	AHU LOCATION: SWIMMING POOL
REFRIG SYS # SRVNG A	HU: NONE	SERVES AREA: SWIMMING POOL
	%	OF BLDG AREA HEATED: 7
AHU UNIT TYPE HEAT	ING AND VENTILATING	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	4,500	CFM-CLG: 0
MIN %OA:	50	MAX %OA: 100
NAMEPLATE		
UNIT MFG:	CENTRAL AIRE	UNIT MODEL: L1016
SUPPLY FAN HP:	2	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	CENTURY	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	8-33-1262-03	RET/EXH FAN MTR MODEL:
COMMENTS:		
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL:	NONE	
HEATING COIL:	HOT WATER	
REHEAT COIL:	NONE	
HUMIDIFIER:	NONE	
COOLING COIL:	NONE	
SCHEDULE		
DAY SCHEDULE NO:	58	MONTH SCHEDULE NO: 1
SCHEDULE COMMENTS:		
SUN:	MON: TUE: WE	ED: THUR: FRI: SAT:
PRES START: 0	0 0	0 0 0 0
PRES STOP: 24	24 24	24 24 24 24
REQ START: 9	6 6	6 12 6 9
REQ STOP: 20	22 22	22 22 22 20
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTE	R OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR U	NOCC:	O COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM	M OCC:	0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM U	NOCC:	0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL	.: N MIXED AI	R DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL	.: Y ECONOMI	IZER DB CONTROL: N TIME CLOCK: Y
RET AIR DMPR CONTROL	.: N ECONOMI	ZER WB CONTROL: N TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL	.: N	
OTHER CONTROLS D	DESCR:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/12/94 PREPARED BY: JMAJN.AMS

BUILDING NUMBER	R: 8069						
AHU NUMBER	२ : HV-8		AHU LOCATIO	N: SWIMM	IING PO	OL	
DEEDIC OVE # ODVNC A	HIL NONE		SERVES AREA	: SWIMMIN	IG BOOI		
REFRIG SYS # SRVNG A	HU: NONE	% OF BLDG	AREA HEATED		IG FOOL	-	7
		76 OF BEBG	ANLATICATED	•			
AHU UNIT TYPE HEAT	ING AND VENTILAT	ING	N	UMBER OF	ZONES	IF MZ U	NIT: 0
CFM-HTG:	4,5	500	CFM-CLG	:		0	
MIN %OA:	.,,-	50	MAX %OA			100	
NAMEPLATE	<u> </u>						
					1.4040		
UNIT MFG:	CENTRAL AIRE			NIT MODEL:			
SUPPLY FAN HP:		2		XH FAN HP:			0
SUPPLY FAN MTR MFG:			RET/EXH FAI				
SUPPLY FAN MTR MODEL:	8-33-1262-03		RET/EXH FAN M	ITR MODEL:			
COMMENTS:				-			
COILS							
Coil	Coil Type		Modulatin	g Valve?			
PREHEAT COIL:	NONE						
HEATING COIL:							
REHEAT COIL:	NONE						
HUMIDIFIER:	NONE						
COOLING COIL:	NONE						
SCHEDULE							
DAY SCHEDULE NO:	58			MONTH	SCHEDU	JLE NO:	1
SCHEDULE COMMENTS:							
SUN:	MON: TUE:	WED: TH	UR: FRI:	SAT:			
		0	0 0 7	0			
PRES START: 0			24 24	24			
PRES STOP: 24	24 24			9			
REQ START: 9	$\frac{6}{22}$ $\frac{6}{22}$ =	6 	12 6 22 22	20			
REQ STOP: 20	22 22		22 22				
MONTHS JAN: FEB:	MAR: APR: MA	AY: JUN:	JUL: AUG:	SEP: (OCT: I	NOV:	DEC:
ON:			пп	П		\boxtimes	\boxtimes
				<u> </u>			
CONTROLS							
TYPE OF CONT	ROLS: PNEUMAT	ΓIC		MOSTAT TY		NGLE SI	ETPOINT
PRESENT TEMP WINT	R OCC:	0		T DECK DE	<u></u>		0
PRESENT TEMP WINTR U		0.		D DECK DE	-		0
				XED AIR DE			0
PRESENT TEMP SUI	<u></u>	0	OTHER SETP		-		
PRESENT TEMP SUM U	NOCC:	0	OTHER SE	TPOINT DEC	∍F: <u> </u>		0
MIN OA DMPR CONTROI	_: N MIXE	D AIR DMPR	CONTROL: N	IMPLEM	ENT DE	MAND LI	MIT CNTRL
MAX OA DMPR CONTROL	·	OMIZER DB		=			TIME CLOC
RET AIR DMPR CONTROL	- H	OMIZER WB		≓	TIME CI	OCK OF	PERATIONAL
EXH AIR DMPR CONTROL		CHILLIN TYD	TOTTINGE. IN	J		.55/(01	- CONTORA
EARLAIN DIREN CONTROL							
OTHER CONTROLS I	ESCR:						
CONTROLS COMM	MENTS:						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

A 01 04 D 0033

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/12/94
PREPARED BY: JMAJN.AMS

	BUILDING AHL	NUMBE NUMBE				AHU I	LOCATIO	N: MEF	₹				
REFR	IG SYS#	SRVNG A	AHU: N	ONE		SERVE	ES AREA:	1ST F	LOOR LO	OCKER F	ROOMS	_	
		·			% OF I	BLDG AREA	HEATED:				13	3	
AHU	UNIT TYP	E HEA	TING ANI	O VENTIL	ATING		N	UMBER	OF ZON	ES IF MZ	UNIT:	0	
		FM-HTG			100		FM-CLG: AX %OA:			100			
NAME			·		<u></u>		AA MOA.			100			
		NIT MFG	: CENT	RAL AIRE			UN	IIT MODI	EL: L1	715			
	SUPPLY				5		RET/EX	(H FAN I	HP:		1.5		
	LY FAN M			·			EXH FAN						
SUPPLY	FAN MTR			BT		RET/EX	H FAN M	TR MODI	EL:				
	CON	MENTS											
COILS													
	Coi	1		Coil Type	9	М	odulating	Valve?					
		AT COIL]						
		NG COIL AT COIL		VATER] 1						
		MIDIFIER					! 						
						F	, 						
	OOOLII	NG COIL	. NONE			L	J						
SCHEE		NG COIL	NONE				ı						
			54					MONT	тн ѕсне	DULE N	O:	1	
DAY	DULE	LE NO:						MONT	тн ѕсне	EDULE N	O:	1	
DAY	SCHEDUILE COMM	LE NO:		TUE:	WED:	THUR:	FRI:	MONT	тн ѕсне	EDULE N	O:	1	
DAY SCHEDU PRES S	SCHEDUILE COMM	LE NO: MENTS: SUN:	54 MON:	TUE:	0	0	0	SAT :	ГН ЅСНЕ	EDULE N	0:	1	
DAY SCHEDU PRES S PRES	SCHEDUILE COMM	LE NO: MENTS: SUN: 0 24	54 MON: 0 24	TUE: 0 24	0 24	0 24	24	SAT: 0 24	тн ѕсне	EDULE N	O:	1	
DAY SCHEDU PRES S PRES REQ S	SCHEDUILE COMM	LE NO: MENTS: SUN:	54 MON:	TUE:	0	0	0	SAT :	тн эсне	EDULE N	O:	1	
DAY SCHEDU PRES S PRES REQ S REQ	SCHEDUILE COMM	LE NO: MENTS: SUN: 0 24 10	54 MON: 0 24 9	TUE: 0 24 9	0 24 9 21	0 24 9	0 24 9	SAT: 0 24 9	TH SCHE	EDULE N	O: DEC:	1	
DAY SCHEDU PRES S PRES REQ S REQ	SCHEDUILE COMM	LE NO: MENTS: SUN: 0 24 10	MON: 0 24 9 21	TUE: 0 24 9 21	0 24 9 21	0 24 9 21	0 24 9 21	SAT: 0 24 9 21				1	
DAY SCHEDU PRES S PRES REQ S REQ	SCHEDUILE COMM	LE NO: MENTS: SUN: 0 24 10 19 FEB:	MON: 0 24 9 21	TUE: 0 24 9 21	0 24 9 21	0 24 9 21	0 24 9 21	SAT: 0 24 9 21	OCT:	NOV:	DEC:	1	
PRES S PRES REQ S REQ MONTHS ON:	SCHEDUILE COMM	LE NO: MENTS: SUN: 0 24 10 19 FEB:	54 MON: 0 24 9 21 MAR: ⊠	TUE: 0 24 9 21	0 24 9 21 MAY: JI	0 24 9 21	0 24 9 21 AUG:	SAT: 0 24 9 21	OCT:	NOV:	DEC:		
PRES S PRES REQ S REQ MONTHS ON:	SCHEDUILE COMM	LE NO: MENTS: SUN: 0 24 10 19 FEB:	MON: 0 24 9 21 MAR: ☑	TUE: 0 24 9 21 APR:	0 24 9 21 MAY: JI	0 24 9 21 UN: JUL:	0 24 9 21 AUG:	SAT: 0 24 9 21 SEP:	OCT:	NOV:	DEC:		
PRES S PRES REQ S REQ MONTHS ON:	SCHEDUILE COMMINICATION OF THE STOP: JAN: ZOLS TYPE	LE NO: MENTS: SUN: 0 24 10 19 FEB:	MON:	TUE: 0 24 9 21 APR:	0 24 9 21 MAY: JI	0 24 9 21 UN: JUL:	QUE THERM HOT COLD	SAT: 0 24 9 21 SEP:	OCT: TYPE: DEG F: DEG F:	NOV:	DEC:	NT 0 0	
PRES S PRES REQ S REQ MONTHS ON: CONTE	SCHEDUILE COMMINICATION OF THE STOP: JAN: JAN: ROLS TYPE SENT TEMP	LE NO: MENTS: SUN: 0 24 10 19 FEB: OF CON WP WINTR U	MON: 0 24 9 21 MAR: IROLS: R OCC: JNOCC:	TUE: 0 24 9 21 APR:	0 24 9 21 MAY: JI	0 24 9 21 UN: JUL:	O 24 9 21 AUG: THERM HOT COLD MIXI	SAT: 0 24 9 21 SEP: DOSTAT DECK D DECK D ED AIR D	OCT: TYPE: DEG F: DEG F: DEG F:	NOV:	DEC:	NT O	
PRES S PRES REQ MONTHS ON: CONTE	SCHEDUILE COMMINICATION OF THE STOP: JAN: ZOLS TYPE SENT TEI	LE NO: MENTS: SUN: 0 24 10 19 FEB: WP WINT WINTR L	MON: 0 24 9 21 MAR: X TROLS: R OCC: JNOCC:	TUE: 0 24 9 21 APR:	0 24 9 21 MAY: JI	0 24 9 21 UN: JUL:	QUE THERM HOT COLD	SAT: 0 24 9 21 SEP: DOSTAT DECK DECK DECK DECK DECK DECK DECK DECK	OCT: TYPE: DEG F: DEG F: DEG F: SCRIP:	NOV:	DEC:	NT 0 0	
PRES S PRES S REQ S REQ MONTHS ON: CONTF	SCHEDUILE COMMINICATION OF THE STOP: START: STOP: START: STOP: START: STOP: TYPE SENT TEMP RESENT T	LE NO: MENTS: SUN: 0 24 10 19 FEB: WP WINT WINTR L IP SUM L	MON: 0 24 9 21 MAR: IROLS: R OCC: JNOCC: JNOCC:	TUE: 0 24 9 21 APR: I	0 24 9 21 MAY: JI	0 24 9 21 UN: JUL:	O 24 9 21 AUG: THERM HOT COLD MIXIER SETPOHER SET	SAT: 0 24 9 21 SEP: DIOSTAT DECK D DECK D DECK D DECK D DIONT DESPOINT D	OCT: TYPE: DEG F: DEG F: DEG F: SCRIP: EG F:	NOV:	DEC:	NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
DAY SCHEDU PRES S PRES REQ S REQ MONTHS ON: CONTF PRE PRESE PRESE MIN O	SCHEDUILE SCHEDUILE COMMINICATION START: STOP: START: STOP: JAN: WITH START: STOP: START: STOP: START: STOP: START: STOP: START: STOP: START: STOP: START: STOP: START: ST	LE NO: MENTS: SUN: 0 24 10 19 FEB: WP WINT WINTR LE MP SUM LE CONTRO	MON: 0 24 9 21 MAR: IROLS: R OCC: JNOCC: JNOCC: L: N	TUE:	MAY: JI	0 24 9 21 UN: JUL:	THERM HOT COLD MIXI ER SETPO HER SETI	SAT: 0 24 9 21 SEP: DIOSTAT DECK D DECK D DECK D DECK D DIONT DESPOINT D	OCT: TYPE: DEG F: DEG F: DEG F: SCRIP: EG F:	NOV:	DEC: SETPOIN	NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N Y
PRES S PRES REQ S RET AI	SCHEDULE SCHEDULE SCHEDULE START: STOP: START: ST	LE NO: MENTS: SUN: 0 24 10 19 FEB: WP WINT WINTR L CONTRO CONTRO	MON: 0 24 9 21 MAR: IROLS: R OCC: JNOCC: JNOCC: L: N L: Y L: N	TUE:	MAY: JI	UN: JUL: O THE OT	THERN HOT COLD MIXI ER SETPO HER SET	SAT: 0 24 9 21 SEP: DIOSTAT DECK D DECK D DECK D DECK D DIONT DESPOINT D	OCT: TYPE: DEG F: DEG F: SCRIP: EG F:	NOV: SINGLE	DEC: SETPOIN	VT 0 0 0 0 UTRLS?	
PRES S PRES REQ S RET AI	SCHEDULE SCHEDULE SCHEDULE START: STOP: START: STOP: START: STOP: START: STOP: START: STOP: START: STOP: START: STOP: START: START: STOP: START: STAR	LE NO: MENTS: SUN: 0 24 10 19 FEB: WP WINT WINTR L CONTRO CONTRO	MON: 0 24 9 21 MAR: IROLS: R OCC: JNOCC: JNOCC: L: N L: Y L: N	TUE:	MAY: JI	UN: JUL: O 24 9 21 UN: JUL: O OTHE	THERN HOT COLD MIXI ER SETPO HER SET	SAT: 0 24 9 21 SEP: DIOSTAT DECK D DECK D DECK D DECK D DIONT DESPOINT D	OCT: TYPE: DEG F: DEG F: SCRIP: EG F:	NOV: SINGLE	DEC: SETPOIN LIMIT CN TIME C	VT 0 0 0 0 UTRLS?	$\overline{\mathbf{Y}}$
PRES S PRES S REQ S RET AI EXH AI	SCHEDULE SCHEDULE SCHEDULE START: STOP: START: ST	LE NO: MENTS: SUN: 0 24 10 19 FEB: WP WINT WINTR LE CONTRO CONTRO CONTRO CONTRO	MON: 0 24 9 21 MAR: X TROLS: R OCC: JNOCC: JNOCC: L: N L: N L: N	TUE:	MAY: JI	UN: JUL: O 24 9 21 UN: JUL: O OTHE	THERN HOT COLD MIXI ER SETPO HER SET	SAT: 0 24 9 21 SEP: DIOSTAT DECK D DECK D DECK D DECK D DIONT DESPOINT D	OCT: TYPE: DEG F: DEG F: SCRIP: EG F:	NOV: SINGLE	DEC: SETPOIN LIMIT CN TIME C	VT 0 0 0 0 UTRLS?	$\overline{\mathbf{Y}}$

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94
PREPARED BY: JMAJN.AMS

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING N	JMBER:	8069				BOILER	RM LOC	ATION:	MER		
BOILER UI	TIV										
0011005.05	DI DO LIE	A T	BLR/COI	VERTER	SERVES AF	REA OR SI	ERVICE:	ALL			
SOURCE OF	BLDG HE	A I									
○ □ BOIL	ER				🖂 ַ	CONVERT	ER				
1 1	R TAG:					NVERTER		CV-1			
	R TYPE:					IVERTER		STM TO H	N		
FUEL	L TYPE:				CO	NV HT SOI	JRCE:				
● CENTRAI	L PLANT D	IRECT									
NAMEPLA'	TE				% AREA H	EATED BY	Y BB RA	DIATION			
BOILER MFG:					BLR (CAP OUTF	UT (BTL	JH):		1,000,000	
UNIT MODEL:					BLI	R CAP INF	UT (BTU	IH):			-
COMMENTS:											-
						-					-
SCHEDULE											
DAYS SCHEDU SCHEDULE COM	==	58					MONT	H SECHE	ULE NO	:	1
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START:	0	0	0	0	0	0	0				
PRES STOP: REQ START:	24 9	=======================================	24	6	12	24 6	<u>24</u> 9				
REQ STOP:		22	22	22	22	22	20				
											_
MONTHS JAN:	FEB:	MAR:	APR:	MAY: J	UN: JUL	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:	X	\boxtimes	\boxtimes						\boxtimes	\boxtimes	_
CONTROL	S										
TYPE OF	BLR CON	ITROLS:	ELECTE	RIC			RESE	T CONTE	ROLS: [N	
OPER	ATING SE	TPOINT:		DE	G F or PSIC	;			_		
TYPE OF BUI	RNER CON	ITROLS:									
CONTR	ROLS COM	MENTS:									
HW PUMP											
PUMP TAG:	1		PUM	P HP:		7.5 I	PUMP MI	FG: DO	ERR		
PUMP SERVICE:	HW PUN	1P				PUI	MP MOD	EL: 917	20AE78T	-	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: JMAJN.AMS

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU		8069			<u> </u>	BL	OG NA	ME:	IN SW P	OOL/GY	М		·	
PER RAD	(SYSTEI	VI TAG) N	IO: RAI	D-1			F	RADS	YS LOCA	ATION:	SWIMMI	NG POOI	L	
so	URCE OF	HEATIN	IG: CEN	NTRAL	PLANT [DIREC	T	5	SERVES	AREA:	SWIMMI	NG POOI		
RAD	NOITAI	UNIT TYP	PE: HW						% AREA	A HTG:			6	
SCHEE	ULE													
DA	YS SCHI	EDULE N	0:		54		MONT	HS SC	CHEDULE	NO:		1		
SCHE	DULE C	OMMENT	'S:					-						
		SUN:	MON:	TU	E: W	ED:	THU	₹:	FRI:	SAT:				
PRES S	TART:	0	0		0	0		0	0 -	0				
PRES	STOP:	24	24	- 2	24	24		24	24	24				
REQ S	TART:	10	9		9	9		9	9	9				
REQ	STOP:	19	21	2	21	21		21	21	21				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JL	JN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:		\boxtimes	\boxtimes	\boxtimes]				\boxtimes	\boxtimes	\boxtimes	
CONTR	OLS													
TY	PE OF R	AD. CON	TROLS:	ELEC	TRIC									
	RADIA	TION CO	NTROL:											
	occ	HT SPA	CE SP:		0									
	UNOC	HT SPA	CE SP:		0				R	ESET C	ONTROL:	N		
	CONTR	OL COM!	MENTS:											-

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

PUMP SERVICE: CW PUMP (Chilled Water)

DATE: 10/12/94

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

PREPARED BY: JMAJN.AMS

BLDG NUMBER:	8069	Bi	DG NAME:	IN SW POOL	J/GYM		
REF. UNIT NUMBER	R/TAG: CWP			LOCA	ATION (MER		
	UNIT TYPE	OTHER		AI	10 3 SERVE	D. AHU-1,2	
NAMEPLATE	E						
CHILLER MOI				TOWER			
CHILLER SERIAL				TOWER I	-		0
CHILLE	R V:	0		TOWER FAN	AMPS:		0
CHILLER AN		0		TOWER FA	N HP:		0
CHILLER CHILLER CAP (TO		0					
COMME							
	VIS.					·	
SCHEDULE	····				*********		
DAYS SCHE		54		MONTHS S	CHEDULE N	10:2	
PRES START: PRES STOP: REQ START:	0 24 10	1: TUE: W 0 0 4 24 9 9	24 2	00	SAT: 0 24 9		
REQ STOP:	19 2	1 21	21 2	1 21	21		
MONTHS JAN: ON:	FEB: MAR:	APR: MAY:	JUN:	JUL: AUG:	SEP: C	OCT: NOV:	DEC:
					\boxtimes		
CONTROLS		•					
TYPE OF C	ONTROLS: E	LECTRIC					
cws	SETPOINT:		0	CNWS SET	POINT:		0
CWR	SETPOINT:		0	CNWR SET	POINT:		0
PRE	SS LITE HI: [N TEN	IP LITE HI:	N OTI	HER INDICA	TIORS:	
	-		LITE LOW:	N			
PRESS	S GAUGES: L	N) TEMP	GAUGES:	N			
CONTROL	S COMMENTS	:					
CW and CNW	/ PUMPS	3					
PUMP TAG: 1		PUMP HP:	7.5	PUM	P MFG:		
UMP SERVICE: CW	PUMP (Chilled	Water)	_	PUMP N	MODEL:		
CW and CNW	/ PUMPS	3					
PUMP TAG: 2		PUMP HP:	0.5		P MFG:		

PUMP MODEL:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: JMAJN.AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

CW and C	NW PL	IMPS			
PUMP TAG:	3	PUMP HP:	0.5	PUMP MFG:	
PUMP SERVICE:	CW PUMP	(Chilled Water)		PUMP MODEL:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

8069

FILE:

8069.XLS

	AIR H		3 UNIT - HVAC U					
AHU NO.:	AHU-1	LOCATIO	N (Rm) UPSTA	IRS NEXT TO V		M IN CEILIN	G	
AHU TYPE:	SZ	MFG.:			MODEL:			
SZ - Single Zone		ating & Vntltno	,	an Coil (Indicate :	2P for 2 Pipe or	4P for 4 Pipe)	
MZ - Mulitzone		iable Air Vol.	i i	Reheat System				
DD - Dual Duct	UH - Unit	Heater		duction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:		*************************************	
NLET VANES	N/A: X	OK:	COMMENTS:	 				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		N/A		
COMMENTS:		1,42, 13,00						
JOINIVILIATO.							·	
					.,			
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:							RP-ACT = Replace	Actuator .
							RP-BD = Replace	Body
AHU PUMP MOTOR	N/A: X	OK:	IREPLACE:	SIZE:				
AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:		101	1	10,22				
JOIWIVIEIN I S.								
	N/A:	OK: X	MISSING:	IECTIMAT.	ED QUANTITY:		6' ON COIL	DIDE
DIDE INCLIATION	mv/A.						U ON COIL	. FIFE
PIPE INSULATION		TOIZ:	MAICCINIC:					
PIPE INSULATION DUCT INSULATION COMMENTS:	N/A: X INSULATI	ок:	MISSING:	ESTIMAT	ED QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

			BLDG:	8069		FILE:	8 069.XLS	
	AIR H	IANDLING	3 UNIT - HVAC					
AHU NO.:	AHU-2	LOCATIO	N (Rm) UPS	STAIRS NEXT TO I	WORKOUT ROC	M IN CEILIN	IG	
AHU TYPE:	SZ	MFG.:			MODEL:			
SZ - Single Zone	i	ating & Vntltno		Fan Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	9)	
/IZ - Mulitzone	1	iable Air Vol.		- Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND	- Induction System	1			
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	ок: х	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	Actuator .
FILTER SECTION	N/A:	TOK: X	REPLACE:	SIZE:				
COMMENTS:	10.11.	101% X	1121 0100.	Joiet.				
JOININIE IN 10.								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMME	NTS:		<u> </u>	
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	NTS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	NTS:			
COMMENTS:								
COOLING COIL	Inira.	Tok. V	IDEDLACE.	louze	TONTHY (1)	Joy v	Top you	100.00
HEATING COIL	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:		JON.	INC. DAOL.	JOIZE.	CIVILVEV	ок:	RP- ACT:	
ONIVICIVIO.							RP-ACT = Replace	
39.3	- W. T. L.	·					RP-BD = Replace (3ody
LILL DUMP MOTOR	I NIVA	Tok v	IDEDI ACE					
AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A:	OK: X	REPLACE:	SIZE:		5-5-1-11 M M		-
	IN/A:	OK: X	REPLACE:	SIZE:				
OMMENTS:								
IPE INSULATION	N/A:	OK:	MISSING: X		ED QUANTITY:		6' ON COIL	PIPE
		1017	MICCING.	TECTIMAT	ED QUANTITY:	· · · · · · · · · · · · · · · · · · ·		
DUCT INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTITY:			

E M C ENGINEERS, INC.PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

			BLDG:	8069		FILE:	8069.XLS	
	AIR	HANDLIN	IG UNIT - HVA	UPGRADE	OBSERVA	TIONS		4.4
AHU NO.:	H&V-1-8	LOCATIO	ON (Rm) CA	ΓWALK				
AHU TYPE:	H&V	MFG.:			MODEL:			
SZ - Single Zone		ating & Vntitn		- Fan Coil (Indicate	2P for 2 Pipe o	r 4P for 4 Pig	oe)	
MZ - Mulitzone	VAV - Va	riable Air Vol.		- Reheat System	•		-,	
DD - Dual Duct	UH - Unit	Heater	IND	- Induction System	า			
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:						<u> </u>	DPR-ACT = Dam	per Actuator
							RP-ACT = Replac	e Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:		Join A	INC. DAGE.	SIZE.				
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITQ:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN		·		
INLET VANES	N/A: X	OK:	COMMENTS:	COMMEN	N13.			
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITC.	NI/A		
RETURN FAN MOTOR	OK:	REPLACE				N/A		
COMMENTS:	OK.	INCPLACE	i.	COMMEN	11S:			
JONNILIVIO.								
COOLING COIL	N/A: X	lok:	REPLACE:	SIZE:	CNTLVLV	OK:	IRP- ACT:	RP-BD:
EATING COIL	N/A:	ок: х	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A:	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:			- '				RP-ACT = Replace	
							RP-BD = Replace I	
							14 00 11001001	
				-	· · · · · · · · · · · · · · · · · · ·			
HU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				***
HU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:								
							·	
				I CTIMATE	D QUANTITY:			
	N/A:	OK: X	MISSING:	IE21IMA1E	D QUANTITY.			
PIPE INSULATION DUCT INSULATION	N/A: N/A:	OK: X	MISSING:		D QUANTITY:			
DUCT INSULATION								

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

7 Nov-94 CWW

PREPARED BY: CHECKED BY:

AJN

BLDG:

8069

FILE:

8069.XLS

	AIR F	IANDLIN(3 UNIT - HVAC	JPGRADE (DBSERVAT	IONS		
AHU NO.:	H&V-9	LOCATION	(Rm) MER N	IEZZANINE				
AHU TYPE:	H&V	MFG.:	AIR THERM		MODEL:	L1715		
SZ - Single Zone	H&V - Hea	ting & Vntltng	. FC - F	an Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe	e)	
/IZ - Mulitzone	VAV - Vari	able Air Vol.	,	Reheat System				
DD - Dual Duct	UH - Unit H	leater	IND - I	nduction System				
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
COMMENTS:	FACE & B	YPASS PNEU	JMATIC				DPR-ACT = Dampe	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	ISIZE:				
COMMENTS:		JON. A	INCI EVOL.	JUIZE.				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE	:	COMMEN	ITS:			
NLET VANES	N/A: X	OK:	COMMENTS:	1				
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN	ITS:	N/A		
COMMENTS:								
OCIVITAL TO.								*****
COOLING COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
		01/-	DEDLACE.		CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:			1	
	N/A: X N/A: X	OK:	REPLACE:	SIZE: SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL				1			1	
REHEAT COIL				1			RP- ACT:	a Actuator
REHEAT COIL				1			RP-ACT:	a Actuator
REHEAT COIL COMMENTS:	N/A: X	ок:	REPLACE:	SIZE:			RP-ACT:	a Actuator
REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: X	ОК: ОК:	REPLACE:	SIZE:			RP-ACT:	a Actuator
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	ок:	REPLACE:	SIZE:			RP-ACT:	a Actuator
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	ОК: ОК:	REPLACE:	SIZE:			RP-ACT:	a Actuator
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	ОК: ОК:	REPLACE:	SIZE:			RP-ACT:	a Actuator
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP-ACT:	a Actuator
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X N/A: X N/A: X	OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV	OK:	RP-ACT:	a Actuator
PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION COMMENTS:	N/A: X N/A: X N/A: X	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP-ACT:	a Actuator

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0722 BLDG NAME: FLIGHT SIMULATOR

GAS METER: N

SUSPECT ACM: N

CONDITIONED SQFT:

7,000

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 4

FRI: SAT: MON: TUE: THUR: SUN: WED: PRES START: 0 0 0 0 0 0 0 24 24 PRES STOP: 24 24 24 24 24 0 6 6 6 6 6 0 **REQ START:** 17 17 17 17 17. 0 REQ STOP: 0

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/18/94 PREPARED BY: JM/AJN/AMS

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

BUILDING NUMBER: 0722	
AHU NUMBER: AHU-1	AHU LOCATION: SIMULATOR ROOM
REFRIG SYS # SRVNG AHU: CH-1	SERVES AREA: SIMULATOR EQUIPMENT RM
% OI	F BLDG AREA HEATED: 50
AHU UNIT TYPE SINGLE ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG : 15,590	CFM-CLG: 15,590
MIN %OA:0	MAX %OA: 100
NAMEPLATE	
UNIT MFG:	UNIT MODEL:
SUPPLY FAN HP: 20	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: FAIRBANKS MOR SUPPLY FAN MTR MODEL: KZK	RET/EXH FAN MTR MFG:
COMMENTS:	RET/EXH FAN MTR MODEL:
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: HOT WATER	×
REHEAT COIL: NONE	
HUMIDIFIER: NONE COOLING COIL: CW	<u>U</u>
SCHEDULE	
DAY SCHEDULE NO: 1	MONTH COURT IN
	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0	: THUR: FRI: SAT:
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24	THUR: FRI: SAT: 0 0 0 0 24 24 24
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 REQ START: 0 6 6 6 6	THUR: FRI: SAT: 0 0 0 0 4 24 24 24 6 6 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24	THUR: FRI: SAT: 0 0 0 0 1 24 24 24 6 6 6 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 PRES STOP: 24 24 24 24 REQ START: 0 6 6 6 REQ STOP: 0 16 16 16 MONTHS JAN: FEB: MAR: APR: MAY: MAY:	THUR: FRI: SAT: 0 0 0 0 4 24 24 24 6 6 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 PRES STOP: 24 24 24 24 REQ START: 0 6 6 6 REQ STOP: 0 16 16 16 MONTHS JAN: FEB: MAR: APR: MAY: MAY:	THUR: FRI: SAT: 0 0 0 0 1 24 24 24 6 6 6 0 1 16 16 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 PRES STOP: 24 24 24 24 REQ START: 0 6 6 6 REQ STOP: 0 16 16 16 MONTHS JAN: FEB: MAR: APR: MAY: MAY:	THUR: FRI: SAT: 0 0 0 0 4 24 24 24 6 6 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: TUE: WED:	THUR: FRI: SAT: 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED:	THUR: FRI: SAT: 0 0 0 0 1 24 24 24 24 24 3 6 6 6 0 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC: X X X X X THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED:	THUR: FRI: SAT: 0 0 0 0 0 1 24 24 24 6 6 6 0 6 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: TUE: WED:	THUR: FRI: SAT: 0 0 0 0 0 1 24 24 24 6 6 6 0 6 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: TUE: WED:	THUR: FRI: SAT: 0 0 0 0 0 1 24 24 24 6 6 6 0 5 16 16 0 JUN: JUL: AUG: SEP: OCT: NOV: DEC:
SCHEDULE COMMENTS: SUN: MON: TUE: WED:	THUR: FRI: SAT: 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 PRES STOP: 24 24 24 24 REQ START: 0 6 6 6 6 REQ STOP: 0 16 16 16 MONTHS JAN: FEB: MAR: APR: MAY: 0 0 0 MONTHS JAN: FEB: MAR: APR: MAY: 0 0 MONTHS JAN: APR: MAY: 0 0 MONTHS JAN: APR: M	THUR: FRI: SAT: 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 REQ START: 0 6 6 6 6 REQ STOP: 0 16 16 16 MONTHS JAN: FEB: MAR: APR: MAY: 0 0 0 0 MONTHS JAN: FEB: MAR: APR: MAY: 0 0 0 0 0 MONTHS JAN: FEB: MAR: APR: MAY: 0 0 0 0 0 0 MONTHS JAN: FEB: MAR: APR: MAY: 0 0 0 0 0 0 0 0 MONTHS JAN: FEB: MAR: APR: MAY: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	THUR: FRI: SAT: 0
SCHEDULE COMMENTS: SUN: MON: TUE: WED: PRES START: 0 0 0 0 0 PRES STOP: 24 24 24 24 REQ START: 0 6 6 6 6 REQ STOP: 0 16 16 16 MONTHS JAN: FEB: MAR: APR: MAY: 0 ON:	THUR: FRI: SAT: 0

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 DATE: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

7 111 1 17	TITE EITH CITTI	JOINTE OB		<u> </u>	
BUILDING NUMBER:	: 0722				•
AHU NUMBER:	: AHU-2	AHU LOCATION	: MEZZANINE	MER	
REFRIG SYS # SRVNG AH	U: CH-1	SERVES AREA:	SIMULATOR E	QUIP ROOM	
	% OF BL	DG AREA HEATED:		30	
AHU UNIT TYPE SINGLE	ZONE	NU	MBER OF ZON	ES IF MZ UNIT: 0	
CFM-HTG:	7,500	CFM-CLG:		7,500	
MIN %OA:	7,300	MAX %OA:		100	
NAMEPLATE	<u> </u>	MAX 700A			
UNIT MFG:		LIMIT	MODEL:		
SUPPLY FAN HP:	1		I FAN HP:	0	
	GE	RET/EXH FAN N	2000		
	5K215AD205B	RET/EXH FAN MTF	=		
COMMENTS:			Name of the latest and the latest an		
COILS					
Coil	Coil Type	Modulating \	/alve?	•	
PREHEAT COIL:	NONE	П			
	HOT WATER	<u>\</u>			
	NONE	<u>-</u>			
	ATOMIZERS				
	CW	—— <u> </u>			
SCHEDULE					
3CHEDULE _				A	
DAY SCHEDULE NO:	1		MONTH SCH	EDULE NO: 3	
SCHEDULE COMMENTS:					
			SAT:		
PRES START:0	0 0 0		0		
PRES STOP: 24	24 24 24	24 24	24		
REQ START:0	$\frac{6}{100} = \frac{6}{100} = \frac{6}{100} = \frac{6}{100}$	$\frac{6}{10} = \frac{6}{10} = \frac{6}{10}$	0		
REQ STOP: 0	16 16 16	<u> </u>	0.		
	MAR: APR: MAY: JUI	N: JUL: AUG:	SEP: OCT:	NOV: DEC:	
ON:				\boxtimes	
CONTROLS					
TYPE OF CONTR	ROLS: PNEUMATIC	THERM	OSTAT TYPE:	SINGLE SETPOINT	
PRESENT TEMP WINTR	occ: 0		DECK DEG F:	0	
PRESENT TEMP WINTR UN			DECK DEG F: D AIR DEG F:	0	
PRESENT TEMP SUM	OCC: 65	OTHER SETPOI			
PRESENT TEMP SUM UN		OTHER SETP		0	
MIN OA DMPR CONTROL:	MIXED AIR DMI	PR CONTROL: N	IMPLEMENT	DEMAND LIMIT CNTRLS	? N
MAX OA DMPR CONTROL:				TIME CLOCK	
RET AIR DMPR CONTROL:			TIME	CLOCK OPERATIONAL	
EXH AIR DMPR CONTROL:					
OTHER CONTROLS DE	ESCR:				
CONTROLS COMME	CNITC				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE:** 10/18/94

PREPARED BY: JM/AJN/AMS AIR HANDLING UNIT SURVEY OBSERVATIONS

RIBLES IN	IG NUMBE	R: 072	2										
	IU NUMBE	=				A 1 (1 1 1	OCATIO	NA	774511511				
							LOCATIO						
REFRIG SYS #	SRVNG A	NHU: C	H-1	-					N OFFIC	CES, CLA	SSROOM	1	
				%	OF BLD	G AREA	HEATED	:			2	10	
AHU UNIT TY	PE SING	LE ZON	E				٨	IUMBER	OF ZON	NES IF M	Z UNIT:	0	
	CFM-HTG:			4,050		С	FM-CLG			4,050			
	MIN %OA:			25			AX %OA			100			
NAMEPLAT	Έ												
(JNIT MFG:	:					Ui	NIT MOD	EL:				
SUPPL	Y FAN HP:			5				XH FAN	-		5		
SUPPLY FAN I						RET/	EXH FAN	MTRM	FG:				
SUPPLY FAN MT						RET/EXI	H FAN M	TR MOD	EL:				
CO	MMENTS:												
COILS			····										
Co	oil		Coil Typ	e		Mo	odulating	Valve?					
PREH	EAT COIL:	NONE			-								
HEAT	ING COIL:	HOT V	VATER			$\overline{}$							
	EAT COIL:												
	MIDIFIER:		-			_ 📙							
COOL	ING COIL:	CW											
SCHEDULE													
SCHEDULE DAY SCHEDU		<u></u>						MON	TH SCH	EDILLE N	IO:		
	JLE NO:	1						MON'	тн ѕсн	EDULE N	lO:	3	
DAY SCHEDU	JLE NO:	MON:	TUE:	WE	D: TH	UR:	FRI:		тн ѕсн	EDULE N	10:	3	
	JLE NO: MENTS:		TUE:	WE	D: TH	UR:	FRI:	MON'	TH SCH	EDULE N	10:	3	1 3
DAY SCHEDU SCHEDULE COM	JLE NO: MENTS: SUN:	MON:	0					SAT:	тн ѕсн	EDULE N	10:	3	
DAY SCHEDU SCHEDULE COMI PRES START: PRES STOP: REQ START:	JLE NO: MENTS: SUN: 0	M ON: 0			0	0		SAT:	тн ѕсн	EDULE N	lo:	3	
DAY SCHEDU SCHEDULE COM PRES START: PRES STOP:	JLE NO: MENTS: SUN: 0	MON: 0 24	0 24		0 24	0 24	0 24	SAT: 0 24	тн ѕсн	EDULE N	10:	3	
DAY SCHEDU SCHEDULE COMI PRES START: PRES STOP: REQ START:	ULE NO: MENTS: SUN: 0 24 0	MON: 0 24	0 24 6 16		0 24 6	0 24 6	0 24 6	SAT: 0 24 0	TH SCH	EDULE N	DEC:	3	
DAY SCHEDU SCHEDULE COMI PRES START: PRES STOP: REQ START: REQ STOP:	ULE NO: MENTS: SUN: 0 24 0	MON: 0 24 6 16	0 24 6 16		0 24 6 16	0 24 6 16	0 24 6 16	SAT: 0 24 0 0				3	
DAY SCHEDU SCHEDULE COMI PRES START: PRES STOP: REQ START: REQ STOP:	JLE NO: MENTS: SUN: 0 24 0 0	MON: 0 24 6 16	0 24 6 16 APR:	MAY:	0 24 6 16 JUN:	0 24 6 16 JUL:	0 24 6 16	SAT: 0 24 0 0 SEP:	OCT:	NOV:	DEC:	3	
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON:	JLE NO: MENTS: SUN: 0 24 0 0	MON: 0 24 6 16 MAR:	0 24 6 16 APR:	MAY:	0 24 6 16 JUN:	0 24 6 16 JUL:	0 24 6 16 AUG:	SAT: 0 24 0 0 SEP:	OCT:	NOV:	DEC:		
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: CONTROLS TYPE	JLE NO: MENTS: SUN: 0 24 0 0 FEB:	MON: 0 24 6 16 MAR: ☑	0 24 6 16 APR:	MAY:	0 224 6 16 JUN:	0 24 6 16 JUL:	0 24 6 16 AUG:	SAT: 0 24 0 0 0 SEP:	OCT:	NOV:	DEC:		
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: CONTROLS TYPE PRESENT TE	JLE NO: MENTS: SUN: 0 24 0 0 FEB: OF CONT	MON: 0 24 6 16 MAR:	0 24 6 16 APR:	MAY:	0 24 6 16 JUN:	0 24 6 16 JUL:	0 24 6 16 AUG: ⊠	SAT: 0 24 0 0 SEP:	OCT: TYPE: DEG F:	NOV:	DEC:	NT	
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: CONTROLS TYPE PRESENT TEMP	JLE NO: MENTS: SUN: 0 24 0 0 FEB: MP WINTE	MON: 0 24 6 16 MAR:	0 24 6 16 APR:	MAY:	JUN: 0 0 0 0 0 0 0 0	0 24 6 16 JUL:	O 24 6 16 16 MIX	SAT: 0 24 0 0 SEP: DOSTAT DECK DECK DECK DECK DECK DECK DECK DECK	OCT: TYPE: DEG F: DEG F: DEG F:	NOV:	DEC:	NT 0	
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: CONTROLS TYPE PRESENT TE PRESENT TEMP	JLE NO: MENTS: SUN: 0 24 0 0 FEB: MP WINTE	MON: 0 24 6 16 MAR: ROLS: ROCC: NOCC:	0 24 6 16 APR:	MAY:	0 24 6 16 JUN:	0 24 6 16 JUL: ⊠	O 24 6 16 16 MIXIR SETPO	SAT: 0 24 0 0 SEP: DOSTAT DECK I	OCT: TYPE: DEG F: DEG F: DEG F: SCRIP:	NOV:	DEC:	NT 0 0 0	
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: CONTROLS TYPE PRESENT TEMP PRESENT TEMP PRESENT TEMP	JLE NO: MENTS: SUN: 0 24 0 0 FEB: MP WINTE WINTE UI FEMP SUM UI	MON: 0 24 6 16 MAR: ROLS: ROCC: NOCC:	0 24 6 16 APR: ⊠	MAY:	0 24 6 16 JUN: ⊠ 0 0 0 0 0	O 24 6 16 JUL:	O 24 6 16 16 MIXIR SETPOLER SET	SAT: 0 24 0 0 SEP: DIOSTAT DECK I D	OCT: TYPE: DEG F: DEG F: BCRIP: EG F:	NOV:	DEC:	NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES START: PRES STOP: REQ STOP: REQ STOP: MONTHS JAN: ON: CONTROLS TYPE PRESENT TEMP PRESENT TEMP PRESENT TEMP PRESENT TEMP MIN OA DMPR	JLE NO: MENTS: SUN: 0 24 0 0 FEB: WINTE WINTE WINTE UITEMP SUM UI	MON: 0 24 6 16 MAR: ROLS: ROCC: NOCC: NOCC:	0 24 6 16 APR: ☑	MAY: ATIC	0 24 6 16 JUN: ⊠ 0 0 0 0 DMPR 0	O 24 6 16 JUL: OTHER OTH	O 24 6 16 AUG: THERM HOT COLD MIXIR SETPOTER SET	SAT: 0 24 0 0 SEP: DIOSTAT DECK I D	OCT: TYPE: DEG F: DEG F: BCRIP: EG F:	NOV:	DEC: SETPOI	NT 0 0 0 0 0 NTRLS?	
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES STOP: REQ START: REQ STOP: MONTHS JAN: ON: CONTROLS TYPE PRESENT TEMP PRESENT TEMP PRESENT TEMP MIN OA DMPR OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DMP OMAX OA DM	JLE NO: MENTS: SUN: 0 24 0 0 FEB: WINTE UNITE U	MON: 0 24 6 16 MAR: ROLS: ROCC: NOCC: NOCC: NOCC:	0 24 6 16 APR: ☑	MAY: ATIC ED AIR DNOMIZ	0 224 6 16 16 JUN: \(\times \) 0 0 0 0 CER DB (CER DB)	OTHER OTHER CONTRO	THERM HOT COLD MIXI R SETPC HER SET	SAT: 0 24 0 0 SEP: DIOSTAT DECK I D	OCT: TYPE: DEG F: DEG F: EG F: EG F: EG F:	NOV: SINGLE	DEC: SETPOI	NT 0 0 0 0 NTRLS?	
DAY SCHEDUSCHEDULE COMING SCHEDULE COMING START: PRES START: PRES STOP: REQ STOP: REQ STOP: MONTHS JAN: ON: CONTROLS TYPE PRESENT TEMP PRESENT TEMP PRESENT TEMP PRESENT TEMP MIN OA DMPR	OF CONT MP WINTF WINTR UI FEMP SUM MP SUM UI CONTROL CONTROL	MON: 0 24 6 16 16 MAR: ROLS: ROCC: NOCC: NOCC: : Y	0 24 6 16 APR: ☑	MAY: ATIC ED AIR DNOMIZ	0 224 6 16 16 JUN: \(\times \) 0 0 0 0 CER DB (CER DB)	O 24 6 16 JUL: OTHER OTH	THERM HOT COLD MIXI R SETPC HER SET	SAT: 0 24 0 0 SEP: DIOSTAT DECK I D	OCT: TYPE: DEG F: DEG F: EG F: EG F: EG F:	NOV:	DEC: SETPOI	NT 0 0 0 0 NTRLS?	=

CONTROLS COMMENTS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/18/94
PREPARED BY: JM/AJN/AMS

EMC NO: 1406-001

BUILDING NUMBER:		
AHU NUMBER:	AHU-4 A	HU LOCATION: SIMULATION RM
REFRIG SYS # SRVNG AH		RVES AREA: COMPUTER RM
	% OF BLDG AR	EA HEATED: 0
AHU UNIT TYPE AC		NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	0	CFM-CLG: 6,400
MIN %OA:	0	MAX %OA:0
NAMEPLATE		
UNIT MFG:	PAC	UNIT MODEL: CUXC-12
SUPPLY FAN HP:	3	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: COMMENTS:	, REI	T/EXH FAN MTR MODEL:
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL:	NONE	
HEATING COIL:	NONE	
REHEAT COIL:	NONE	
	NONE	
COOLING COIL:	CW	
SCHEDULE		
DAY SCHEDULE NO:	1	MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
SUN:	MON: TUE: WED: THUR:	FRI: SAT:
PRES START: 0	0 0 0	
PRES STOP: 24	24 24 24 24	
REQ START: 00 REQ STOP: 0	6 6 6 6 16 16 16	
REQUIOF. 0	10 10 10 10	
	AR: APR: MAY: JUN: J	UL: AUG: SEP: OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONTR	OLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR		HOT DECK DEG F: 0 COLD DECK DEG F: 0
PRESENT TEMP WINTR UN	occ:	MIXED AIR DEG F: 0
PRESENT TEMP SUM PRESENT TEMP SUM UN		OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL:	N MIXED AIR DMPR CO	NTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL:	N ECONOMIZER DB CO	NTROL: N TIME CLOCK: N
RET AIR DMPR CONTROL:	N ECONOMIZER WB CO	NTROL: N TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL:	N	
OTHER CONTROLS DE		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94
PREPARED BY: JM/AJN/AMS

BOILER AND CONVERTER SURVEY OBSERVATIONS

BOILEI		NBER: (3722				BOILER	RM LOC	ATION:	2ND FL.	MER	
		BLDG HEA	\T	BLR/CON	VERTER	SERVES A	AREA OR S	ERVICE:	AHU-1	2,3		
• 🗵	BOILE BOILEF BOILER	R R TAG: [TYPE:]	BLR-1 HW (UP TO NAT. GAS	250 DEG)		C C	CONVERTED ONVERTER ONVERTER ONVERTER ONVERTER	R TAG:				
CE	NTRAL	PLANT D	IRECT									:
IAMEF	PLAT	Έ				% AREA	HEATED B	Y BB RAI	DIATION			
BOILER MOI UNIT MOI COMME	DEL: 4	BURNHAN IFW92SPI					CAP OUTI	•			480,100 602,000	=
DAYS SO			4					MONTH	H SECHE	ULE NO	:	1
PRES S PRES REQ S REQ	STOP:	SUN: 0 24 0 0	MON: 0 24 6 17	TUE: 0 24 6 17	WED: 0 24 6 17	THUR: 0 24 6 17	FRI: 0 24 6 17	SAT: 0 24 0 0				
IONTHS ON:	JAN:	FEB:	MAR:	APR: M		UN: JU		SEP:	ост: ⊠	NOV:	DEC:	
ONTR	ROLS	<u> </u>										
TYPE (OPERA OF BUR	BLR CON TING SE NER CON	TPOINT: TROLS:	ELECTR		G F or PS	IG	RESE	T CONTE	ROLS: [N	
W PU		OLS COM	WENIS:									
	TAG:	1 HW PLIM	P	PUMP	HP:			PUMP MF				

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE**: 10/18/94

PREPARED BY: JM/AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 0722	2 BLDG	NAME: FLIGHT SIMULATOR	
REF. UNIT NUMBER/TAG	3: CH-1	LOCATION (MER#):	OUTSIDE
		AHU'S SERVED:	AHU-1,2,3
UNIT	T TYPE AIR COOLED CONDE	NSING UNIT W/ CHW	
NAMEPLATE			
CHILLER MFG:	TSI	TOWER MFG:	
CHILLER MODEL:	CA2CD70	# OF TOWER FANS:	6
CHILLER SERIAL NO:		TOWER FAN V:	480
CHILLER V:	480	TOWER FAN AMPS:	2.3
CHILLER AMPS:	67.5	TOWER FAN HP:	1
CHILLER PH:	3		
CHILLER CAP (TONS):	70		
COMMENTS:			
SCHEDULE			
DAYS SCHEDULE	E NO: 1	MONTHS SCHEDULE NO:	2
SCHEDULE COMME	INTS:		
SUN	N: MON: TUE: WED:	THUR: FRI: SAT:	
PRES START:	0 0 0 0	0 0 0	
PRES STOP: 2	24 24 24 24	24 24 24	
REQ START:	0 6 6 6	6 6 0	
REQ STOP:	0 16 16 16	16 16 0	
MONTHS JAN: FEB	: MAR: APR: MAY: J	IUN: JUL: AUG: SEP: OC	T: NOV: DEC:
ON:			
CONTROLS			
T/D5 05 00VT	DOLO. ELECTRIC		
TYPE OF CONT	ROLS: ELECTRIC	 `	
CWS SET	POINT:	CNWS SETPOINT:	<u> </u>
CWR SET	POINT:	CNWR SETPOINT:	0
PRESS L	ITEHI: N TEMPL	ITE HI: N OTHER INDICATI	ORS:
PRESS LITE	E LOW: N TEMP LITE	LOW: N	
		UGES: Y	
CONTROLS CO		Luciumi	 ;
CW and CNW P			
CVV and CINVV P	UIVIFS		
PUMP TAG: 1	PUMP HP:	5 PUMP MFG:	
PUMP SERVICE: CW PUM	иР (Chilled Water)	PUMP MODEL:	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE:** 10/18/94

PREPARED BY: JM/AJN/AMS

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER:	0722			BLDG	NAME: F	LIGHT SI	MULATOR				
REF. UNIT NUMBER	Z/TAG:	CH-2				LOC	ATION (N	IFR#\·	OUTSIDE		
						AHU'S SERVED: AHU-4					
	UNIT :	TYPE /	AIR COOLE	D CONDE	NSING UN			.,	10-4		
NAMEDIATE	•	-					•		-		
NAMEPLATE	-										
CHILLER M	IFG: [LARKIN				TOWE	R MFG:				
CHILLER MOD	-	PFG16			# C	F TOWER	FANS:			2	
CHILLER SERIAL	NO:					TOWER	FAN V:			0	
CHILLER	२ V: 🚆		4	160	TO	WER FAN	AMPS:			0	
CHILLER AM	=			2.2		TOWER F	AN HP:			0.5	
CHILLER	_			3							
CHILLER CAP (TON	NS): _			16							
COMMEN	TS:										
SCHEDULE				1/4 2							
DAYS SCHED	ULE N	10:	1			MONTHS S	CHEDIII	E NO:			
SCHEDULE COM			<u>.</u>				JOHEDUL	L NU:	2		
	SUN:	MON:	TUE:	WED:	THUR:	FRI:	SAT:				
PRES START:	0	0	0	0	0	0	0				
PRES STOP:	24	24	24	24	24	24	24				
REQ START:	0	6	6	6	6	6	0				
REQ STOP:	0	16	16	16	16	16	0				
MONTHS JAN: F	EB:	MAR:	APR:	MAY: J	UN: JUL	: AUG:	SEP:	OCT:	NOV:	DEC	
ON: □		П	П	_					_	DEC:	
<u> </u>	- ᆜ	<u> </u>			☑ ☑				<u> </u>		
CONTROLS											
TYPE OF CO	NITOO	1.C. FI	FOTDIO								
TYPE OF CO			ECTRIC								
CWS S				0		CNWS SE	TPOINT:			0	
CWR S	ETPO	INT:		0	. (ONWR SE	TPOINT:			0	
PRES	S LITE	HI: N		TEMP LI	TE HI: N	7 от	HER INDI	CATIORS	3:		
PRESS L	JITE LO	ow: 🔼	<u>.</u>	EMP LITE	LOW: N						
PRESS	GAUG	ES: Y	_	TEMP GAL]					
CONTROLS	сом	MENTS:									
CW and CNW	PU	MPS			•						
PUMP TAG: 1			PUMP HP		0.5		D 1450				
UMP SERVICE:			FUND HP		0.5		IP MFG:				
						PUMPI	MODEL:				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG: **722** FILE: 722.XLS

AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS											
AHU NO.:	AHU-1	LOCATIO	N (Rm)								
AHU TYPE:	SZ	MFG.:	MFG.: MODEL:								
SZ - Single Zone	H&V - He	ating & Vn	ting & Vntltng. FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe)								
MZ - Mulitzone	VAV - Va	riable Air V	able Air Vol. RHT - Reheat System								
DD - Dual Duct	UH - Unit	Heater		IND - Indu	ction Syste	em					
O.A. DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT	OK:	RP- ACT:			
R.A. DAMPER	N/A:	OK: X	REPLACE		SIZE:	DPR-ACT	OK: X	RP- ACT:			
E.A. DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT	OK:	RP- ACT:			
F. & B. DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT	OK:	RP- ACT:			
ZONE DAMPER	N/A: X	OK:	REPLACE		SIZE:	DPR-ACT	OK:	RP- ACT:			
COMMENTS:	20 HP - F	AIRBANKS	MORRIS					DPR-ACT = Dan	nper Actuator		
								RP-ACT = Repla	ce Actuator		
CH TED CECTION	NAL/A	IOV. V	REPLACE		SIZE:	A.L.	- X				
FILTER SECTION	N/A:	OK: X	INELTACE		JUIZE,						
COMMENTS:							 				
SUPPLY AIR FAN	ок: х	REPLACE	FAN BEAF	IINGS:	COMMEN	TS:					
SUPPLY FAN MOTOR	OK: X	REPLACE			COMMEN	TS:					
INLET VANES	N/A: X	ОК:	COMMEN	TS:							
RETURN AIR FAN	OK:	REPLACE	FAN BEAF	RINGS:	COMMEN	TS:	N/A				
RETURN FAN MOTOR	ок:	REPLACE			COMMEN	TS:	N/A				
COMMENTS:											
O WINI EL TO I											
COOLING COIL	N/A:	ок: х	REPLACE	:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:		
HEATING COIL	N/A: X	ок:	REPLACE		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:		
PREHEAT COIL	N/A: X	ок:	REPLACE	:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD:		
REHEAT COIL	N/A: X	ок:	REPLACE	:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:		
COMMENTS:	PNEUMA	TIC						RP-ACT = Repla	ace Actuator		
								RP-BD = Replac	e Body		
AHU PUMP MOTOR	N/A: X	OK:	REPLACE	•	SIZE:						
AHU PUMP SEALS	N/A: X	OK:	REPLACE	:	SIZE:						
COMMENTS:											
PIPE INSULATION	N/A:	OK: X	MISSING		<u> </u>	ED QUANT					
DUCT INSULATION	N/A:	OK: X	MISSING		ESTIMAT	ED QUANT	ITY:				
COMMENTS:									-		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: 10 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

722 BLDG: FILE: 722.XLS **AIR HANDLING UNIT - HVAC UPGRADE OBSERVATIONS** MEZZANINE MER AHU NO.: AHU-2 LOCATION (Rm) AHU TYPE: MFG.: **AIRTEMP** MODEL: AV170 FC - Fan Coil (Indicate 2P for 2 Pipe or 4P for 4 Pipe) SZ - Single Zone H&V - Heating & Vntltng. MZ - Mulitzone VAV - Variable Air Vol. RHT - Reheat System DD - Dual Duct **UH - Unit Heater** IND - Induction System RP- ACT: O.A. DAMPER N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X SIZE: DPR-ACT RP- ACT: R.A. DAMPER N/A: OK: X REPLACE: OK: X E.A. DAMPER N/A: X lok: REPLACE: SIZE: DPR-ACT llok: RP- ACT: DPR-ACT F. & B. DAMPER N/A: X ок: REPLACE: SIZE: OK: RP- ACT: ZONE DAMPER N/A: X OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: COMMENTS: GE 10 HP MOTOR DPR-ACT = Damper Actuator RP-ACT = Replace Actuator OK: X FILTER SECTION N/A: REPLACE: SIZE: COMMENTS: REPLACE FAN BEARINGS: X SUPPLY AIR FAN COMMENTS: EITHER FAN OR MOTOR OK: X COMMENTS: SUPPLY FAN MOTOR OK: X REPLACE: BEARINGS ARE BAD INLET VANES N/A: X OK: COMMENTS: RETURN AIR FAN REPLACE FAN BEARINGS: COMMENTS: OK: N/A RETURN FAN MOTOR OK: COMMENTS: REPLACE: COMMENTS: COOLING COIL N/A: OK: X REPLACE: CLEAN SIZE: CNTLVLV OK: X RP- ACT: RP-BD: CNTLVLV HEATING COIL N/A: OK: X REPLACE: CLEAN SIZE: OK: RP- ACT:X RP-BD:X PREHEAT COIL OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BD: N/A: REHEAT COIL N/A: OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT: RP-BD: COMMENTS: RP-ACT = Replace Actuator RP-BD = Replace Body AHU PUMP MOTOR N/A: OK: REPLACE: SIZE: AHU PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: MISSING: **ESTIMATED QUANTITY:** PIPE INSULATION OK: N/A: DUCT INSULATION OK: MISSING: **ESTIMATED QUANTITY:** N/A: COMMENTS:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

OCATION: FT. RILEY, KA			BLDG:	722			FILE:	722.XLS	
	AIR I	ANDLIN	G UNIT - H	VAC UPGRA		BSERVAT	TIONS		
HU NO.:	AHU-3	LOCATIO	N (Rm)	MEZZANINE ME	ER				
HU TYPE:	SZ	MFG.:				MODEL:	· = 4 A		
Z - Single Zone	H&V - Hea	ting & Vntltng		FC - Fan Coil (In		for 2 Pipe or	4P for 4 Pipe)	
Z - Mulitzone	VAV - Vari	able Air Vol.		RHT - Reheat Sy	•				
D - Dual Duct	UH - Unit H	Heater		IND - Induction S					 -
.A. DAMPER	N/A:	OK: X	REPLACE:	1	ZE:	DPR-ACT	OK: X	RP- ACT:	
A. DAMPER	N/A:	OK: X	REPLACE:		ZE:	DPR-ACT	OK: X	RP- ACT:	
A. DAMPER	N/A: X	OK:	REPLACE:		ZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:		ZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZ	ZE:	DPR-ACT	OK:	RP- ACT:	
OMMENTS:								DPR-ACT = Damper	
								RP-ACT = Replace A	Actuator
	IIV.	IOV:	IREPLACE:	IQI	ZE:				
ILTER SECTION	N/A:	OK:	REPLACE:	101	<u></u>		·		
COMMENTS:									
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARIN	GS: C	OMMENT	S:			
SUPPLY FAN MOTOR	OK: X	REPLACE			OMMENT	S:	5 - 7.5 HF		
NLET VANES	N/A: X	IOK:	ICOMMEN	S:		······································			
	OK:		FAN BEARIN		OMMENT	S:	N/A		
RETURN AIR FAN		REPLACI			OMMENT				
RETURN FAN MOTOR	OK:	INCI EAG				·			
COMMENTS:						<u> </u>			
							·		
	Thurs.	OK: X	REPLACE	Is	IZE:	CNTLVLV	OK:	RP- ACT:X	RP-BD:X
COOLING COIL	N/A: N/A:	OK: X	REPLACE		IZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL	N/A: X	OK: A	REPLACE		IZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE		IZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	IV/A. A	1014.	1,5,5,6					RP-ACT = Replace	Actuator
COMMENTS:								RP-BD = Replace I	Body
AHU PUMP MOTOR	N/A:	OK:	REPLACE	: S	SIZE:				
AHU PUMP SEALS	N/A:	OK:	REPLACE		SIZE:				
COMMENTS:									
COMMENTS:									
COMMENTS:									
	N/A:	OK:	MISSING:			D QUANTITY			
PIPE INSULATION DUCT INSULATION	N/A:	JOK: JOK: X	MISSING:			D QUANTITY			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

722

FILE: 722.XLS

	AIV L	JANDLIN	G UNIT - HVAC	UFURADE	JR2FKAY	HONS		
AHU NO.:	AHU-4	LOCATIO	N (Rm) SIMU	LATION ROOM				
AHU TYPE:	SZ	MFG.:	ED PAC		MODEL:	CUXC-12		
SZ - Single Zone		ating & Vntltn	g. FC - F	an Coil (Indicate	2P for 2 Pipe o	r 4P for 4 Pip	e)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND -	Induction System				
O.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	··· · · · · · ·
ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	100% RE	TURN AIR. C	COOLING COIL ONLY I	NSIDE UNIT. HU	MIDITY		DPR-ACT = Damp	er Actuator
	CONTRO	LLER					RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:	·			······································
COMMENTS:				<u> </u>				
SUPPLY AIR FAN	JOK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:			***************************************
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
		OK:	COMMENTS:	JOONINIEN				
INLET VANES	IIN/A·X	ILUN'						
	N/A: X			ICOMMEN	ITC:	NI/A		
RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN		N/A		
RETURN AIR FAN RETURN FAN MOTOR			FAN BEARINGS:	COMMEN		N/A		
RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE	FAN BEARINGS:			N/A		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK: OK:	REPLACE	E FAN BEARINGS:	COMMEN	TS:			
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK: OK:	REPLACE REPLACE OK: X	E FAN BEARINGS:	COMMEN	CNTLVLV	 ОК: X	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK: N/A: N/A: X	REPLACE OK: X OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: N/A: X N/A: X	REPLACE OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK:	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: X	REPLACE OK: X OK:	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: X N/A: X	REPLACE OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK:	RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: X N/A: X	REPLACE OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: X N/A: X	REPLACE OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	OK: OK: N/A: N/A: X N/A: X	REPLACE OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	OK: OK: N/A: N/A: X N/A: X N/A: X	REPLACE OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK	OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
INLET VANES RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	OK: OK: OK: OK: OK: OK: OK: OK: OK: OK	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X · OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

722

FILE:

	c – + XIIGH		OLUBERT.		III A =			110
	VEI IVIOL	RATION E					ERVATIO	NS
CHILLER / EQUIP. NO.		CH-1	LOCATION		OUTSIDE			
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	TSI		MODEL:	30AOCD7	
C-WCT = Centrifugal w/ W		•				g w/ Air Coole		
R-WCT = Reciprocating w/		Cooling Tower				w/ Water Side	Cooling Tow	ver
ACCU = Air Cooled Conde			-	CT = Cooling				
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:	68 RLA @		
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:	56 RLA @	460V	
COMP. MOTOR COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:	······································		
	N/A:	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
CT/ACCU FAN MTR CT/ACCU FAN MTR	N/A: N/A:	OK: X	REPLACE:		SIZE:			
		OK: X	REPLACE:		SIZE:			
COMMENTS:	TYPICAL BRAND N	OF 6 EW R-ACCU (N	וחד שחטעבי	IID VETI				
COOLING TOWER	N/A: X		REPLACE:	/-UF 1E1)	ICIZE:			
AIR COOLED COND.	N/A: X	OK:	REPLACE:		SIZE:			
	IN/A: X	JOK:	REPLACE:		SIZE:			
COMMENTS:	· · · · · · · · · · · · · · · · · · ·							
CHILLER INSUL.	Thua.	Toy. V	Transpire		I FATURE	-5 0111111111		
CHILLER INSUL.	N/A:	OK: X	MISSING:			D QUANTITY		
	N/A:	OK:	MISSING:	Х	ESTIMATE	ED QUANTITY	:	30' @ 6"
COMMENTS:								
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:	5 HP		**************************************
CHW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A:	OK:	REPLACE:	******	SIZE:			
CHW PUMP MOTOR	N/A:	OK:	REPLACE:		SIZE:		77.000.01	
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:			
COMMENTS:	HEAT TAP	PE ON EXPOSE	D PIPE					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY:

NLA NLA

722

BLDG:

FILE:

	REFRIGE	RATION	EQUIPME	NT - HVA	C UPGR	ADE OBS	ERVATIONS
CHILLER / EQUIP. NO.		CH-2	LOCATION	(RM)	OUTSIDE		
REFG. EQUIP. TYPE:			MFG.:	LARKIN		MODEL:	PFG16
C-WCT = Centrifugal w/				R-ACCU =	Reciprocating	w/ Air Coole	d Condensing Unit
R-WCT = Reciprocating		e Cooling Tow	er				e Cooling Tower
ACCU = Air Cooled Con	densing Unit			CT = Cooli	ng Tower		
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
COMP. MOTOR	N/A:	OK:	REPLACE:		SIZE:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:		
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:		
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:		
COMMENTS:							
COOLING TOWER	N/A:	JOK:	REPLACE:		SIZE:		
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:		
COMMENTS:	1/2 HP FA	 !					
CHILLER INSUL.	N/A:	OK: X	MISSING:		ESTIMATE	D QUANTITY	' :
CHW PIPE INSUL.	N/A:	OK: X	MISSING:		ESTIMATE	D QUANTITY	·
OLIVE SUMPLY OF CO.	16774	Tov. V	Testines				
CHW PUMP MOTOR	N/A: N/A:	OK: X	REPLACE:	T-1-700	SIZE:		
CHW PUMP SEALS		OK: X	REPLACE:		SIZE:		
CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A:	OK: OK:	REPLACE:		SIZE:		
CHW PUMP MOTOR			REPLACE:		SIZE:		
CHW PUMP SEALS	N/A: N/A:	OK:	REPLACE:		SIZE:	- Wi.	
CHW PUMP MOTOR	N/A:	IOK:			SIZE:		
CHW PUMP SEALS	N/A:	OK:	REPLACE:		SIZE:		
COMMENTS:	1.5 HP CEI		INEPLACE.		SIZE.		
OOWINEN TO.	1.0 FF CEI	NIUNI					
				·		V-14	The second secon
							
				····			
							. 144

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

FILE: 722.XLS

BOI	LER &	CONVE	RTER - HVAC L	JPGRADE OBSERVATIONS
BOILER/CONVERTER N	VO.	BLR-1	LOCATION (RM)	MEZZANINE MER
BOILER TYPE:		HW	MFG.: BURNHA	M MODEL: 4FW-92-5PL-0-GP
CONVERTER TYPE:			MFG.:	MODEL:
STM - Steam			o Hot Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water				DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOS	PHERIC:	POWER:	OK: REPLACE: X
COMMENTS:				
BLR PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: 1/3 HP
BLR PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
COMMENTS:				
BLR INSULATION	N/A:	OK: X	MISSING:	TESTIMATED QUANTITY:
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
COMMENTS:	IN/A.	JOK. X	Jiviiooiivo.	LSTIMATED COARTITI.
HW PUMP MOTO HW PUMP SEALS	N/A:	OK: OK:	REPLACE:	SIZE:
HW PUMP MOTO		OK:	REPLACE:	SIZE:
HW PUMP SEALS		ОК:	REPLACE:	SIZE:
HW PUMP MOTO		OK:	REPLACE:	SIZE:
HW PUMP SEALS	l	OK:	REPLACE:	SIZE:
HW PUMP MOTO		OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:				
	N/A:	ОК:	REPLACE:	SIZE:
CV PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:
COMMENTS:				
CV INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:
	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.				
CV PIPE INSUL. COMMENTS:	<u> </u>			

722

BLDG:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

ACA 01-94-D-0033

DATE: 10/18/94
PREPARED BY: JM/AJN/AMS

EMC NO: 1406-001

LOCATION: FT. RILEY, KS

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 0724 BLDG NAME: FLIGHT SIMULATOR

GAS METER: Y

SUSPECT ACM: N

CONDITIONED SQFT:

13,188

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 1

SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 REQ START: 0 6 6 6 6 6 0 **REQ STOP:** 0 16 16 16 16 16 0

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/18/94

LOCATION: FT. RILEY, KS

PREPARED BY: JM/AJN/AMS

B1111 B1110 111111			
BUILDING NUMBER AHU NUMBER		AHU LOCATION: MER	:
		OFFICES	
REFRIG SYS # SRVNG A		SERVES AREA: OFFICES LDG AREA HEATED:	60
	% OF B	LDG AREA HEATED.	
AHU UNIT TYPE MULT	IZONE	NUMBER OF ZONES	F MZ UNIT: 3
CFM-HTG:	6,200	CFM-CLG: 6	200
MIN %OA:	10	MAX %OA:	100
NAMEPLATE			
UNIT MFG:	TRANE	UNIT MODEL: CCD	B14CDCHO
SUPPLY FAN HP:	7.5	RET/EXH FAN HP:	0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL:	The second secon	RET/EXH FAN MTR MODEL:	A A A A A A A A A A A A A A A A A A A
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:		⊠	
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW	\boxtimes	
SCHEDULE			
DAY SCHEDULE NO:	11	MONTH SCHEE	DULE NO: 3
SCHEDULE COMMENTS:			
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	4 .4 .00
PRES START: 0	0 0 0	0 0 0	
PRES STOP: 24	24 24 24	24 24 24	
REQ START: 0	7 7 7	7 7 0	
REQ STOP: 0	16 16 16	16 16 0	
MONTHS JAN: FEB:	MAR: APR: MAY: JU	UN: JUL: AUG: SEP: OCT:	NOV: DEC:
ON:			
CONTROLS			SINGLE SETPOINT
CONTROLS TYPE OF CONTROLS	TROLS: PNEUMATIC	THERMOSTAT TYPE:	
CONTROLS TYPE OF CONTROLS PRESENT TEMP WINT	TROLS: PNEUMATIC	THERMOSTAT TYPE: S HOT DECK DEG F: COLD DECK DEG F:	SINGLE SETPOINT
CONTROLS TYPE OF CONTROLS	TROLS: PNEUMATIC	THERMOSTAT TYPE: S	SINGLE SETPOINT 0
CONTROLS TYPE OF CONTROLS PRESENT TEMP WINT	TROLS: PNEUMATIC R OCC: (THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F:	SINGLE SETPOINT 0 0
CONTROLS TYPE OF CONTROLS PRESENT TEMP WINTR U	TROLS: PNEUMATIC R OCC: C JNOCC: C M OCC: C	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F:	SINGLE SETPOINT 0 0
CONTROLS TYPE OF CON' PRESENT TEMP WINTR L PRESENT TEMP SU PRESENT TEMP SUM L	TROLS: PNEUMATIC R OCC: (C) JNOCC: (C) M OCC: (C) JNOCC: (C)	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: OTHER SETPOINT DESCRIP: OTHER SETPOINT DEG F:	SINGLE SETPOINT 0 0 0 0
CONTROLS TYPE OF CONTROLS PRESENT TEMP WINTE UPRESENT TEMP SUPPRESENT TEMP SUPPRESENT TEMP SUM UPRESENT TEMP SUM UPRES	TROLS: PNEUMATIC R OCC: C JNOCC: C M OCC: C JNOCC: C MIXED AIR DI	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: O OTHER SETPOINT DESCRIP: O OTHER SETPOINT DEG F: MPR CONTROL: N IMPLEMENT DESCRIPED	SINGLE SETPOINT 0 0 0 0 0 EMAND LIMIT CNTRLS?
TYPE OF CON- PRESENT TEMP WINT PRESENT TEMP WINTE U PRESENT TEMP SU PRESENT TEMP SUM U MIN OA DMPR CONTRO MAX OA DMPR CONTRO	TROLS: PNEUMATIC R OCC: CO JNOCC: CO JNOCC: CO JNOCC: CO L: N MIXED AIR DI L: Y ECONOMIZER	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: O OTHER SETPOINT DESCRIP: O OTHER SETPOINT DEG F: MPR CONTROL: N IMPLEMENT DER CONTROL: N	SINGLE SETPOINT 0 0 0 0 EMAND LIMIT CNTRLS?
TYPE OF CONTROLS TYPE OF CONTROLS PRESENT TEMP WINTE UPRESENT TEMP SUMPRESENT TEMP SUMP SUMPRESENT TEMP SUMP SUMP SUMP SUMP SUMP SUMP SUMP SU	TROLS: PNEUMATIC R OCC: C JNOCC: C M OCC: C JNOCC: C L: N MIXED AIR DI L: Y ECONOMIZER L: N ECONOMIZER	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: O OTHER SETPOINT DESCRIP: O OTHER SETPOINT DEG F: MPR CONTROL: N IMPLEMENT DER CDB CONTROL: N	SINGLE SETPOINT 0 0 0 0 EMAND LIMIT CNTRLS?
TYPE OF CON- PRESENT TEMP WINT PRESENT TEMP WINTE U PRESENT TEMP SU PRESENT TEMP SUM U MIN OA DMPR CONTRO MAX OA DMPR CONTRO	TROLS: PNEUMATIC R OCC: C JNOCC: C M OCC: C JNOCC: C L: N MIXED AIR DI L: Y ECONOMIZER L: N ECONOMIZER	THERMOSTAT TYPE: HOT DECK DEG F: COLD DECK DEG F: MIXED AIR DEG F: O OTHER SETPOINT DESCRIP: O OTHER SETPOINT DEG F: MPR CONTROL: N IMPLEMENT DER CONTROL: N	SINGLE SETPOINT 0 0 0 0 EMAND LIMIT CNTRLS?

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/18/94 PREPARED BY: JM/AJN/AMS

	7111221110	91111 00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	DOLIN	77110	110	
BUILDING NUMBE	R: 0724						
AHU NUMBE	R: AHU-2		AHU LOCAT	TION: MER			
REFRIG SYS # SRVNG A	uu. Cu a		055750 457		ITED DO	214	
REFRIG 515 # SKVNG A	HU: CH-2	% OF BLD	SERVES ARI AREA HEATE		JTER RO	JM	40
		% OF BLD	ANEA HEAT				40
AHU UNIT TYPE SING	LE ZONE			NUMBER C	F ZONES	IF MZ UNIT:	: 0
CFM-HTG:	6,	000	CFM-CL	_G:	6.	000	
MIN %OA:		10	MAX %C		<u>~,</u>	100	
NAMEPLATE				Na. 11. 19. 19.			
UNIT MFG:	TRANE			UNIT MODE	CCD	B12CEMJ	_
SUPPLY FAN HP:		7.5		EXH FAN HI			
SUPPLY FAN MTR MFG:				AN MTR MF			<u>=</u>
SUPPLY FAN MTR MODEL:	6-35741601		RET/EXH FAN				=
COMMENTS:	NV data				·		=
COILS							_
Coil	Coil Type		Modulati	ing Valve?			
PREHEAT COIL:	NONE						
HEATING COIL:	HOT WATER						
REHEAT COIL:	NONE						
HUMIDIFIER:	NONE						
COOLING COIL:	CW						
SCHEDULE							
DAY SCHEDULE NO:	11			MONT	SCHED	ULE NO:	3
SCHEDULE COMMENTS:						<u> </u>	<u>×</u>
SUN:	MON: TUE:	MED. TU	UD. FDI.	CAT.			
PRES START: 0	0 0	WED: TH	UR: FRI: 0	SAT:			
PRES STOP: 24	24 24	24	0 0 24	24			
REQ START: 0	$\frac{27}{7} = \frac{27}{7}$	7	7 7	0			
REQ STOP: 0	16 16	16	16 16	0			
							
	MAR: APR: M	AY: JUN:	JUL: AUG	SEP:	OCT: I	NOV: DEC	
ON:				\boxtimes	\boxtimes	\boxtimes	
CONTROLS				<u> </u>			
TYPE OF CONT	ROLS: PNEUMAT	TIC	THE	RMOSTAT T	YPE: SI	NGLE SETPO	TNIC
PRESENT TEMP WINTE	COCC:	0	н	OT DECK DE	G F:		0
PRESENT TEMP WINTR UI	-	0		LD DECK DE			0
PRESENT TEMP SUN	l occ:	0:		POINT DESC			
PRESENT TEMP SUM UI	NOCC:	0		ETPOINT DE	_		0
MIN OA DMPR CONTROL	: N MIXE	D AIR DMPR	CONTROL: [N IMPLEM	ENT DE	MAND LIMIT	CNTRLS? N
MAX OA DMPR CONTROL	: Y ECON	IOMIZER DB	CONTROL:	<u> </u>			ECLOCK: Y
RET AIR DMPR CONTROL	: Y ECON	OMIZER WB	CONTROL:	<u> </u>	TIME CL	OCK OPERA	-
EXH AIR DMPR CONTROL	: N						
OTHER CONTROLS D	ESCR:						
CONTROLS COMM	ENTS:	*****					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/18/94 **PREPARED BY:** JM/AJN/AMS

LOCATION: FT. RILEY, KS

BUILDING NUMBER: 0724 AHU NUMBER: CRU-1	AHU LOCATION: COMPUTER ROOM
REFRIG SYS # SRVNG AHU: CH-3,4	SERVES AREA: COMPUTER ROOM
	6 OF BLDG AREA HEATED: 0
AHU UNIT TYPE OTHER	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG: 0	CFM-CLG: 8,600
	0 MAX %OA: 0
NAMEPLATE	
UNIT MFG: LIEBERT	UNIT MODEL: FE192GVA10
SUPPLY FAN HP: 5	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR MODEL:
COMMENTS:	
COILS	
Coil Coil Type	Modulating Valve?
PREHEAT COIL: NONE	
HEATING COIL: NONE	
REHEAT COIL: ELECTRIC	
HUMIDIFIER: ELECTRIC	
COOLING COIL: DX	
SCHEDULE	
DAY SCHEDULE NO: 11	MONTH SCHEDULE NO: 2
SCHEDULE COMMENTS:	
SUN: MON: TUE: W	VED: THUR: FRI: SAT:
PRES START: 0 0 0	0 0 0
PRES STOP: 24 24 24	24 24 24 24
REQ START: 0 7 7	7 7 7 0
REQ STOP: 0 16 16	<u>16</u> <u>16</u> <u>0</u>
MONTHS JAN: FEB: MAR: APR: MAY	: JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON:	
CONTROLS	
TYPE OF CONTROLS: ELECTRIC	THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC:	HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	COLD DECK DEG F: 0
	MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC:	0 OTHER SETPOINT DESCRIP: 0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXED A	AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: N ECONOM	the same of the sa
	MIZER DB CONTROL: N TIME CLOCK: N
RET AIR DMPR CONTROL: N ECONOM	MIZER UB CONTROL: N TIME CLOCK: N MIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N
RET AIR DMPR CONTROL: N ECONOM EXH AIR DMPR CONTROL: N	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE:** 10/18/94 **PREPARED BY:** JM/AJN/AMS

	MDEING CITIT	SOITVET OB	JENVAII	0110	
BUILDING NUMBER:	0724				_
AHU NUMBER:	CRU-2	AHU LOCATION	: COMPUTER	ROOM	
REFRIG SYS # SRVNG AHL	J: CH-3,4	SERVES AREA:	COMPUTER F	MOOM	
	% OF B	LDG AREA HEATED:		0	
AHU UNIT TYPE OTHER		NU	MBER OF ZON	ES IF MZ UNIT:	0
CFM-HTG:	0 :	CFM-CLG:		8,600	
MIN %OA:	0	MAX %OA:	!	0	
NAMEPLATE					
UNIT MFG:	LIEBERT	UNI	T MODEL: FE	192GVA10	
SUPPLY FAN HP:	5	RET/EXI	H FAN HP:	0	
SUPPLY FAN MTR MFG:	The state of the s	RET/EXH FAN	MTR MFG:		
SUPPLY FAN MTR MODEL:		RET/EXH FAN MT	R MODEL:		
COMMENTS:					
COILS					
Coil	Coil Type	Modulating '	Valve?		
PREHEAT COIL:	NONE				
HEATING COIL:	NONE				
REHEAT COIL:	ELECTRIC				
HUMIDIFIER:	ELECTRIC				
COOLING COIL:	DX				
SCHEDULE			 ;		
DAY SCHEDULE NO: SCHEDULE COMMENTS:			MONTH SCH	EDULE NO:	2
	MON: TUE: WED:	THUR: FRI:	SAT:		
PRES START: 0	0 0 0	0 0	0		
PRES STOP: 24	24 24 24	24 24	24		
REQ START: 0	7 7 7	7 7	0		
REQ STOP: 0	16 16 16	16 16	0		
MONTHS JAN: FEB: M.	AR: APR: MAY: JU	JN: JUL: AUG:	SEP: OCT:	NOV: DEC:	
ON:					
CONTROLS					
TYPE OF CONTR	OLS: ELECTRIC		OSTAT TYPE: DECK DEG F:	SINGLE SETPOIN	T 0
PRESENT TEMP WINTR	OCC: 0		DECK DEG F:		0
PRESENT TEMP WINTR UN	OCC: 0		D AIR DEG F:		0
PRESENT TEMP SUM	OCC: 0	•		!	<u>=</u>
PRESENT TEMP SUM UN			POINT DEG F:		Ō
MIN OA DMPR CONTROL:	N MIXED AIR DN	PR CONTROL: N	IMPLEMENT	DEMAND LIMIT CN	TRLS?
MAX OA DMPR CONTROL:		DB CONTROL: N		TIME C	-
RET AIR DMPR CONTROL:	 	WB CONTROL: N	TIME	CLOCK OPERATION	=
					•
EXH AIR DMPR CONTROL:	N				
EXH AIR DMPR CONTROL: OTHER CONTROLS DE					

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE:** 10/18/94

PREPARED BY: JM/AJN/AMS

BOILER AND CONVERTER SURVEY OBSERVATIONS

	NUMBER:	0724				BOILER	RM LOC	ATION:	MER		
BOILER (וואנ		DI DIOCI	\/FDT==							
SOURCE	OF BLDG HE	AT	BLR/CON	VERTER SE	RVES AR	EA OR SE	ERVICE:				
BOIL	LER TAG: ER TYPE:	BLR-1 HW (UP TO NAT. GAS	250 DEG)		CON	ONVERTI IVERTER /ERTER V HT SOL	TAG:				· · · · · · · · · · · · · · · · · · ·
CENTR	AL PLANT I	DIRECT									
NAMEPLA	ATE	4 . 15 . 1		9/	6 AREA HE	ATED BY	BB RAI	DIATION	:		
BOILER MFG: UNIT MODEL: COMMENTS:	WGFD-45	0				AP OUTP CAP INP			THE RESERVE AND ADDRESS OF THE PARTY AND ADDRE	360,000 450,000	
SCHEDUL	.E										
DAYS SCHEI		1					MONTI	H SECHI	DULE NO	: 1	
PRES STAR PRES STO REQ STAR REQ STO	P: 24 T: 0	MON: 0 24 6 16	TUE: 0 24 6 16	WED: 0 24 6 16	THUR: 0 24 6 16	FRI: 0 24 6 16	SAT: 0 24 0 0				
MONTHS JA ON:		MAR:	APR: N	MAY: JUN	l: JUL:	AUG:	SEP:	ост: ⊠	NOV:	DEC:	
ONTROL	_S										
OPE TYPE OF B	OF BLR CON ERATING SE URNER CON TROLS CON	TPOINT:	ELECTRI		F or PSIG		RESE	T CONTE	ROLS: [N	
HW PUMF)										
PUMP TAC		1P	PUMP	HP:		_	UMP MF		RATHON (215TTDI	R7026HTL	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE**: 10/18/94

PREPARED BY: JM/AJN/AMS

BLDG NUMBER:	0724			BLD	G NAME:	FLIG	HT SIMU	JLATOR			
REF. UNIT NUMBER	TAG:	CH-4					LOCA	TION (M	IER#): [C	DUTSIDE	į.
								U'S SER		RU-1,2	
	UNIT T	YPE AI	R COOLE	D COND	ENSING	UNIT,					
NAMEPLATE											
CHILLER M	FG: P	RYCODE	R				TOWER	MFG:			:
CHILLER MOD	EL: D	SO419A				# OF 1	OWER F				4
CHILLER SERIAL I	NO:					Т	OWER F	AN V:			460
CHILLER	≀ V:		4	160		TOWE	R FAN A	MPS:			0
CHILLER AM	PS:			0		TO	WER FA	N HP:			0.75
CHILLER I	PH:			3							
CHILLER CAP (TON	IS): _			10							
COMMEN	TS:										
SCHEDULE											
DAYS SCHED			11			МО	NTHS SC	CHEDUL	E NO:	2	
SCHEDULE COM	MENT	S:									
PRES START: PRES STOP: REQ START: REQ STOP:	0 24 0 0	MON: 0 24 7 16	TUE: 0 24 7 16	WED (24) 4 2	R: 0 4 7 6	FRI: 0 24 7 16	0 24 0 0			
	EB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:				\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes			
CONTROLS											
TYPE OF CO	NTRO	LS: ELI	ECTRIC								
cws s	SETPO	INT:		······································	54,	CN	WS SET	POINT:			0
	ETPO	=			0		WR SET		<u> </u>		0
PRESS PRESS PRESS		ow: 🔃	<u> </u>	TEMP EMP LIT	LITE HI: E LOW:	N N			ICATIOR	S:	
CONTROLS	COM	MENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: JM/AJN/AMS

BLDG N	IUMBER	: 0724			BI	DG NAI	WE: FLI	GHT SIM	ULATOR		**	
REF. UNIT	NUMBE	ER/TAG	: CH-3					LOCA	TION (M	ER#)· (OUTSIDE	
									IU'S SER		CRU-1,2	
		UNIT	TYPE A	IR COO	LED CO	NDENSI	NG UNIT,				J110 1,2	
NAME	PLAT		-									
C	HILLER	MFG:	PRYCOD	FR				TOWER	MEC			
	LER MC		DSO419/				# OF	TOWER				4
CHILLE	R SERIA							OWER F				460
	CHILL	ER V:			460			ER FAN				0
СН	ILLER A	MPS:			0			WER FA	-			0.75
	CHILLE	R PH:			3							0.13
CHILLER	CAP (TO	ONS):			10							
	COMME	ENTS:										
SCHED					*****							
	YS SCHI	OMMEN	TS:	11					CHEDUL	E NO:	2	
PRES S	TART:	SUN:	MON:		:: W E	ED: TH	IUR:	FRI:	SAT:			
PRES S	:	24	24		<u> </u>	24	24	24	<u>0</u> 24			
REQ S	TART:	0	7		7	7		- - -	0			
REQ S	STOP:	0	16	1	6	16	16	16	0			
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
						\boxtimes			\boxtimes			
ONTR	OLS											
T	PE OF	CONTRO	DLS: EL	ECTRIC								
	CWS	SETPO	DINT:			64	CN	IWS SET	POINT:			0
	CWR	SETPO	DINT:			0	CN	IWR SET	POINT:			0
	PRE	ESS LIT	EHI: N		TEM	P LITE H	ii: N	ОТН	ER INDI	CATIORS	ş.	
	PRESS	S LITE L	.ow: 🗖	Ī		ITE LOV	•••	-		-7.101	<u></u>	
	PRES	S GAU	GES: N	ī		GAUGE						_
_			IMENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94
PREPARED BY: JM/AJN/AMS

BLDG NUMBER: 0724	BLDG NAME: FLIGHT SIMULATOR	₹
REF. UNIT NUMBER/TAG: CH-1	LOCATION (I	MER#): OUTSIDE
	AHU'S SE	RVED:
UNIT TYPE AIR COOLED	CONDENSING UNIT W/ CHW	
NAMEPLATE		
CHILLER MFG: TRANE	TOWER MFG:	
CHILLER MODEL: CGADC254ABAIGTJW	R # OF TOWER FANS:	3
CHILLER SERIAL NO:	TOWER FAN V:	460
CHILLER V: 460	TOWER FAN AMPS:	1.8
CHILLER AMPS: 23.5	TOWER FAN HP:	1
CHILLER PH: 3 CHILLER CAP (TONS): 25		
CHILLER CAP (TONS).		
COMMENTS:		
SCHEDULE		
DAYS SCHEDULE NO: 11	MONTHS SCHEDU	LE NO: 2
SCHEDULE COMMENTS:		
SUN: MON: TUE:	WED: THUR: FRI: SAT:	
PRES START: 0 0 0	0 0 0 0	
PRES STOP: 24 24 24	24 24 24 24	
REQ START : 0 7 7	7 7 7 0	
REQ STOP: 0 16 16	16 16 16 0	
MONTHS JAN: FEB: MAR: APR: MA	Y: JUN: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:		
CONTROLS		
TYPE OF CONTROLS: ELECTRIC		
	0, 0,0,0,0	
CWS SETPOINT:	0 CNWS SETPOINT CNWR SETPOINT	
		0
		DICATIORS:
	MP LITE LOW: N	
PRESS GAUGES: N TE	MP GAUGES: Y	
CONTROLS COMMENTS:		
CW and CNW PUMPS		
PUMP TAG: 1 PUMP HP:	3 PUMP MFG	
PUMP SERVICE: CW PUMP (Chilled Water)	PUMP MODEL	

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/18/94

PREPARED BY: JM/AJN/AMS

										_ , , , ,	1110110
BLDG NUMBER	: 0724			BL	DG NAM	E: FLIC	SHT SIM	ULATOR			
REF. UNIT NUMB	ER/TAG:	CH-2					LOCA	TION (M	ER#): C	UTSIDE	· · · · · · · · · · · · · · · · · · ·
							Al	IU'S SER	VED: A	HU-2	
	UNIT	TYPE A	IR COOL	ED CON	NDENSIN	IG UNIT					
NAMEPLAT	E										
CHILLER	MFG:	TRANE					TOWER	MFG:			
CHILLER M	7					# OF	TOWER	Ė			3
CHILLER SERIA	L NO:				-	7	OWER I	AN V:			460
CHILI	ER V:			460		TOW	ER FAN	AMPS:			1.8
CHILLER	AMPS:			17.2		TC	WER FA	N HP:			1
CHILLE		THE PERSON ASSESSMENT OF THE PERSON AS		3							
CHILLER CAP (T	ONS):			20							
СОММ	ENTS:										
CHEDULE											
DAYS SCH			11			МС	ONTHS S	CHEDUL	E NO:	2	
	SUN:	MON:	TUE	: WE	D: TH	IUR:	FRI:	SAT:			
PRES START:	0	0		0	0	0	0	0			
PRES STOP:	24	24	2	4	24	24	24	24			
REQ START:	0	7	======	7	7	$-\frac{7}{2} =$		0			
REQ STOP:	0	16	1	6	16	16	16	0			
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:	П	П	П		\times	冈	\boxtimes	\boxtimes	П	П	П
ONTROLS											
TYPE OF	CONTRO	DLS: EL	ECTRIC.								
CN	S SETPO	DINT:			0	C	WS SE	TPOINT:			0
CM	R SETP	DINT:			0	CI	NWR SE	TPOINT:			0
Þ	RESS LIT	EHI:	1	TEM	P LITE H	II: N	ОТ	HER INDI	CATIOR	S:	
• •			7	TEMP L	ITE LOV	N: N					
	SS LITE I	.ow: 🔼	≌								
PRES	SS LITE L		==		GAUGE	s: N					
PRES PRE	SS GAU		==		GAUGE	S: N					
PRES PRE CONTRO	SS GAU	GES: N	==		GAUGE	s: N					
PRES PRE	SS GAU	GES: N	==	TEMP	GAUGE	s: N	PUN	IP MFG:	MARAT	HON	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW AJN

BLDG:

724

FILE:

CHECKED BY: 724.XLS

AHU NO.:	AHU-1	LOCATIO	GUNIT - HVAC UN (Rm) MER					
AHU TYPE:	MZ	MFG.:	TRANE		MODEL:			
SZ - Single Zone		ating & Vntltng		an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pine	1	
MZ - Single Zone		iable Air Vol.	·	Reheat System	2F 101 2 F1pe 01 -	+r ioi + ripe)	
DD - Dual Duct	UH - Unit I			duction System				
					DDD ACT	16 _{1/2} V	IDD ACT.	
D.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
COMMENTS:							DPR-ACT = Dampe	er Actuator
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	ITS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		14// 1		
		INLFLACE		COMME	110.	·		
COMMENTS:								
			· · · · · · · · · · · · · · · · · · ·					
								7
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
		OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
PREHEAT COIL REHEAT COIL	N/A: X	JON.					RP-ACT = Replace	Actuator
REHEAT COIL	N/A: X							
REHEAT COIL	N/A: X	Jor.					RP-BD = Replace B	lody
REHEAT COIL	N/A: X	JOK.						lody
REHEAT COIL	N/A: X	JOK.						lody
REHEAT COIL COMMENTS:	N/A: X	OK:	REPLACE:	ISIZE:				Sody
	N/A: X	OK:		SIZE:				3ody
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS			REPLACE:					Sody
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	OK:						lody
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	OK:						lody
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X	OK:	REPLACE:	SIZE:	ED QUANTITY:			lody
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION	N/A: X	OK: OK:	REPLACE: MISSING:	SIZE:	ED QUANTITY:			iody
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION DUCT INSULATION	N/A: X N/A: X	OK:	REPLACE:	SIZE:	ED QUANTITY: ED QUANTITY:			oody
AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X	OK: OK:	REPLACE: MISSING:	SIZE:				oody

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

			BLDG:	724		CHECKE		A
	AID	IANDI IN				FILE:	724.XLS	
AHU NO.:		IANULIN	G UNIT - HVAC	UPGRADE (JBSERVA1	IONS		
AHU TYPE:	AHU-2 SZ	LOCATIO	ON (Rm) MER		1			
SZ - Single Zone		MFG.:			MODEL:			
MZ - Mulitzone		ating & Vntltn	•	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pipe	9)	
DD - Dual Duct	UH - Unit	riable Air Vol.	1	Reheat System				
O.A. DAMPER				Induction System				
	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER E.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER ZONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Dam	per Actuator
							RP-ACT = Replac	e Actuator
FILTER SECTION	N/A:	JOK: X	REPLACE:	SIZE:				
COMMENTS:		Jon. x	INEFLACE:	SIZE:				
JOINIVIENTS.							**	
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITC:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
NLET VANES	N/A: X	OK:	COMMENTS:	COMMEN	113.			
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	ITC:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		IN/A		
COMMENTS:		THE BROE		COMMEN	113.			
70mm2m 0.								
	7-1-1			~				
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	IDD ACT	IDD DD
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK: A	RP- ACT:	RP-BD
REHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
	<u> </u>		THE BIOL.	JOIZE.	CIVILVEV	Jor.	RP- ACT:	RP-BD:
COMMENTS:								
COMMENTS:							RP-ACT = Replace	
COMMENTS:							RP-ACT = Replace	
COMMENTS:								
COMMENTS:	N/A: X	Tok:	REPLACE:	ISI7F:				
	N/A: X N/A: X	OK:	REPLACE:	SIZE:				
NHU PUMP MOTOR	N/A: X N/A: X		REPLACE:	SIZE: SIZE:				
NHU PUMP MOTOR NHU PUMP SEALS	N/A: X N/A: X							
NHU PUMP MOTOR NHU PUMP SEALS	N/A: X N/A: X							
NHU PUMP MOTOR NHU PUMP SEALS	N/A: X N/A: X			SIZE:	ED QUANTITY:			
NHU PUMP MOTOR NHU PUMP SEALS COMMENTS:	N/A: X	OK:	REPLACE:	SIZE:	D QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

BLDG:

724

FILE:

	AIK II	ANDLING	UNIT - HVAC L		DOEKVAI			
HU NO.:	AHU-3	LOCATION	I (Rm) COMP	UTER ROOM				
HU TYPE:	SZ	MFG.:	LIEBERT		MODEL:			
Z - Single Zone	H&V - Hea	ting & Vntltng.	i i	an Coil (Indicate 2	P for 2 Pipe or 4	IP for 4 Pipe)		
IZ - Mulitzone	VAV - Vari	able Air Vol.		Reheat System				
D - Dual Duct	UH - Unit H	Heater	IND - I	nduction System				···
).A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	11	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT		RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	- 1	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT		RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:							DPR-ACT = Damper	Actuator
							RP-ACT = Replace /	Actuator
ILTER SECTION	N/A:	ок: х	REPLACE:	SIZE:				
COMMENTS:								
								····
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN				
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	TS:			
NLET VANES	N/A: X	OK:	COMMENTS:					
	OK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:	N/A		
RETURN AIR FAN	OK:			COMMEN		N/A		·
RETURN AIR FAN RETURN FAN MOTOR	OK: OK:	REPLACE REPLACE				N/A		
RETURN AIR FAN						N/A		
RETURN AIR FAN RETURN FAN MOTOR						N/A		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK:	REPLACE		COMMEN		N/A	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK:	REPLACE	REPLACE:		TS:			RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	N/A: N/A:	REPLACE OK: X OK: X	REPLACE:	COMMEN SIZE:	CNTLVLV	OK: X		
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	REPLACE OK: X OK: X	REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: N/A: N/A: X	OK: X OK: X OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: X N/A: X N/A: X	OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK:(NONE) OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG: **724**

FILE:

	REFRIG	RATION I	EQUIPMENT - H	AC UPGRADE OBSERVATIONS	724.ALS
CHILLER / EQUIP. NO		CH-1	LOCATION (RM)	OUTSIDE	
REFG. EQUIP. TYPE:		R-ACCU	MFG.: TRANE	MODEL: CGADC254	
C-WCT = Centrifugal w		•		= Reciprocating w/ Air Cooled Condensing Unit	
R-WCT = Reciprocating	-	e Cooling Tow	er ASB-WO	CT = Absorption w/ Water Side Cooling Tower	
ACCU = Air Cooled Cor	ndensing Unit		CT = Co	oling Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
COMP. MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:	TYPICAL	OF 2			
COOLING TOWER	N/A: X	JOK:	[REPLACE:	SIZE:	
AIR COOLED COND.	N/A:	OK: X	REPLACE:	SIZE:	
COMMENTS:			1		
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:	
COMMENTS:			·		
CHW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:	
COMMENTS:					
		CANDA.			
				AND THE STREET, SALES OF THE SALES OF	
	**			The state of the s	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

BLDG:

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY:

CWW AJN

724

FILE:

	REFRIGI	RATION	EQUIPME	AVH - TV	C UPGRA	ADE OBS	ERVATIONS	
CHILLER / EQUIP. NO		CH-2	LOCATION	(RM)	OUTSIDE	-		
REFG. EQUIP. TYPE:		R-ACCU	MFG.:	LIEBERT		MODEL:	CGADC254	
C-WCT = Centrifugal w	/ Water Side (Cooling Tower		R-ACCU =	Reciprocating	w/ Air Coole	d Condensing Unit	
R-WCT = Reciprocating	g w/ Water Sid	e Cooling Tow	er/er				Cooling Tower	
ACCU = Air Cooled Co	ndensing Unit			CT = Cooli	ng Tower		·	
COMP. MOTOR	N/A:	ОК: Х	REPLACE:		SIZE:			
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
COMMENTS:	TYPICAL	OF 4 FANS						
COOLING TOWER	N/A: X	OK:	REPLACE:		SIZE:			
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:			
COMMENTS:						****		
CHILLER INSUL.	N/A:	OK: X	MISSING:		ESTIMATE	D QUANTITY	· ·	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:		ESTIMATE	D QUANTITY	· ·	
CHW PUMP MOTOR	N/A:	TOK: V	IDEDI ACE.		Total			
CHW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:		****	
CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:		SIZE: SIZE:			····
CHW PUMP MOTOR	N/A: X	lok:						
CHW PUMP MOTOR CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR			REPLACE:					
CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: X	OK:	REPLACE:		SIZE: SIZE:			
	N/A. ^	JUN.	REPLACE.		SIZE:			
COMMENTS:								
								
	4							

			•					

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

10 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

724

FILE: 724.XLS

SOILER TYPE:	BOILER/CONVERTER NO. BOILER TYPE: CONVERTER TYPE: STM - Steam HW - Hot Water BOILER BURNER COMMENTS: BLR PUMP MOTOR	STM/HW HTHW/H\ JATMOSP	HW - Steam to Ho N - High Tem HERIC:	MFG.: AJAX MFG.: ot Water Conv. p. HW to HW Cv. POWER: X	HTHW/ST DHW - Do OK:	MODEL: M - High Tem mestic Hot W	np HW to Steam Convertor Vater Convertor
MFG.: MFG.	CONVERTER TYPE: STM - Steam HW - Hot Water BOILER BURNER COMMENTS:	HTHW/H\ ATMOSP	- Steam to Ho W - High Tem HERIC:	MFG.: ot Water Conv. p. HW to HW Cv. POWER: X	DHW - Do	MODEL: M - High Tem mestic Hot W	np HW to Steam Convertor Vater Convertor
STM - Steam STM/HW - Steam to Hot Water Conv. HTHW/STM - High Temp HW to Steam Convertor HTHW/HW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: SIZE:	STM - Steam HW - Hot Water BOILER BURNER COMMENTS:	HTHW/H\ ATMOSP	N - High Tem HERIC:	ot Water Conv. p. HW to HW Cv. POWER: X	DHW - Do	M - High Terr mestic Hot W	/ater Convertor
HW - Hot Water HTHWIMW - High Temp. HW to HW CV. DHW - Domestic Hot Water Convertor BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: HW PUMP BEALS N/A: X OK: REPLACE: SIZE: HW PUMP BEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE:	HW - Hot Water BOILER BURNER COMMENTS: BLR PUMP MOTOR	HTHW/H\ ATMOSP	N - High Tem HERIC:	p. HW to HW Cv. POWER: X	DHW - Do	mestic Hot W	/ater Convertor
BOILER BURNER ATMOSPHERIC: POWER: X OK: X REPLACE: COMMENTS: BLR PUMP MOTOR NA: X OK: REPLACE: SIZE: BLR PUMP SEALS NIA: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION NIA: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION NIA: OK: X REPLACE: SIZE: HW PUMP MOTOR NA: OK: X REPLACE: SIZE: HW PUMP MOTOR NA: OK: X REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: HW PUMP SEALS NIA: X OK: REPLACE: SIZE: HW PUMP MOTOR NA: X OK: REPLACE: SIZE: OMMENTS: CV PUMP MOTOR NA: X OK: REPLACE: SIZE: CV PUMP SEALS NA: X	BOILER BURNER COMMENTS: BLR PUMP MOTOR	ATMOSP	HERIC:	POWER: X	OK:		
BLR PUMP MOTOR	COMMENTS: BLR PUMP MOTOR	N/A: X	ОК:			X	REPLACE:
BLR PUMP MOTOR N/A: X OK: REPLACE: SIZE: BLR PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:	BLR PUMP MOTOR			TREPLACE:			
BLR PUMP SEALS				REPLACE:			
BLR PUMP SEALS				TREPLACE:			
BLR PUMP SEALS				IREPLACE:			
COMMENTS: BLR INSULATION		N/A: X	JOK:				
BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:				REPLACE:	SIZE:		
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:	COMMENTS:						
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:							
COMMENTS: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: HW PUMP SEALS N/A: OK: X REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:	BLR INSULATION	N/A:	ок: х	MISSING:	ESTIMAT	ED QUANTIT	Y:
HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: HW PUMP SEALS N/A: OK: X REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:	PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMAT	ED QUANTIT	Ÿ:
HW PUMP SEALS	COMMENTS:						
HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP SEALS N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: HW PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: MISSING: ESTIMATED QUANTITY:				l l			
HW PUMP SEALS		JL					
HW PUMP MOTOR		H					
HW PUMP SEALS							
HW PUMP MOTOR		11			1		
HW PUMP SEALS							
CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:		51	1			***************************************	
CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:		JEWY	101.	INDI EXOL.	JOILL.	···	
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	OOIANAICIA I O.	· · · · · · · · · · · · · · · · · · ·					11.000
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:							
COMMENTS: CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:		III .	I				
CV INSULATION N/A: X OK: MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:		N/A: X	OK:	REPLACE:	SłZE:		
CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	COMMENTS:						
CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:							
CV PIPE INSUL. N/A: X OK: MISSING: ESTIMATED QUANTITY:	CV INSULATION	N/A: X	IOK.	IMISSING:	IESTIMATI	D OHANTITY	γ.
COMMENTO	COMMENTS:	IIIV. V	1011.	IVIIOGING.	LOTHWAT	LD QUANTIT	I.

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: CWW/AJN

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7739 BLDG NAME: MOVING TARGET SIM BLDG

ELECTRIC METER: N

GAS METER: N SUSPECT ACM: Y CONDITIONED SQFT:

4,074

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 11.

SUN: MON: TUE: WED: THUR: FRI: SAT: 0 PRES START: 0 0 0 0 0 0 24 7 24 24 24 24 PRES STOP: 24 24 7 7 7 7 0 **REQ START:** 0 0 16 16 16 REQ STOP: 16 16

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: CWW/AJN

BUILDING NUMBER: 7739
AHU NUMBER: AHU-1 AHU LOCATION: MER
REFRIG SYS # SRVNG AHU: CH-1 SERVES AREA: ALL % OF BLDG AREA HEATED: 80
% OF BLDG AREA HEATED: 80
AHU UNIT TYPE MULTI ZONE NUMBER OF ZONES IF MZ UNIT: 3
CFM-HTG: 7,064 CFM-CLG: 7,064
MIN %OA: 15 MAX %OA: 100
NAMEPLATE
UNIT MFG: TRANE UNIT MODEL: CLIMATE CHANG
SUPPLY FAN HP: 5 RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG: U.S. ELCTRICAL RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL: A907 RET/EXH FAN MTR MODEL: COMMENTS:
COILS
Coil Coil Type Modulating Valve?
PREHEAT COIL: NONE
HEATING COIL: HOT WATER
REHEAT COIL: NONE
HUMIDIFIER: NONE
SCHEDULE
DAY SCHEDULE NO: 11 MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:
SUN: MON: TUE: WED: THUR: FRI: SAT:
PRES START: 0 0 0 0 0 0 0
PRES STOP: 24 24 24 24 24 24 24
REQ START: 0 7 7 7 7 0
REQ STOP: 0 16 16 16 16 0
MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON:
CONTROLS
TYPE OF CONTROLS: ELECTRIC THERMOSTAT TYPE: SINGLE SETPOINT
PRESENT TEMP WINTR OCC: 0 HOT DECK DEG F: 0
PRESENT TEMP WINTR UNOCC: 0 COLD DECK DEG F: 0 MIXED AIR DEG F: 0
PRESENT TEMP SUM OCC: 0 OTHER SETPOINT DESCRIP:
PRESENT TEMP SUM UNOCC: 0 OTHER SETPOINT DEG F: 0
MIN OA DMPR CONTROL: N MIXED AIR DMPR CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS? N
MAX OA DMPR CONTROL: Y ECONOMIZER DB CONTROL: N TIME CLOCK: N
RET AIR DMPR CONTROL: Y ECONOMIZER WB CONTROL: N TIME CLOCK OPERATIONAL? N
EXH AIR DMPR CONTROL: Y
OTHER CONTROLS DESCR:
CONTROLS COMMENTS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94
PREPARED BY: CWW/AJN

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILD	ING NUN	IBER:	7739					BOILER	RM LOC	ATION:	MER		
BOILE	R UN	IT									_		
				BLR/CO	NVER	TER SE	RVES AR	EA OR S	ERVICE:	ALL			
	CE OF B		AT										
● 🛛	BOILER							ONVERT					
	BOILER 30ILER 1	ř	BLR-1	250 DEC)				NVERTER	=				==
	FUEL		HW (UP TO NAT. GAS	200 DEG)				VERTER V HT SOI	-				
		i.											
CE	NTRAL I	PLANT D	DIRECT										
NAMER	PLAT	E				%	AREA HE	ATED B	/ BB RAI	DIATION	:		20
BOILER N	MFG: C	RANE CO	D.				BLR C	AP OUTF	UT (BTU	Н):		308,000	
UNIT MO	DEL: 20	00-385						CAP INP				385,000	
COMME	NTS:												
CHEC							· · · · · · · · · · · · · · · · · · ·						
CHED	ULE												
DAYS SO		=	11						MONT	SECHE	ULE NO		1
SCHEDULE	COMME												
PRES S	TADT.	SUN:	MON:	TUE:		ED: TI	HUR:	FRI:	SAT:				
PRES	;	24	24	24		24	24	24	<u>0</u> 24				
REQ S		0	7	7	. :	7	7	= 7	0				
REQ:	STOP:	0	16	16		16	16	16	0				
MONTHS	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-
ON:	\boxtimes	\boxtimes	\boxtimes	\boxtimes						\boxtimes	\times	\boxtimes	
CONTR	OLS			,									-
TY	PE OF E	SLR CON	TROLS:	ELECTI	RIC				RESE	CONTR	ous. F	ΥÌ	
	OPERAT	TING SE	TPOINT:			DEG F	or PSIG					لبند	
TYPE (F BURN	IER CON	TROLS:	1									
(ONTRO	LS COM	MENTS:										
W PU	MP												
PUMP	TAG:	1	i	PUM	P HP:		0.0	8 F	UMP MF	G: MAI	RATHON		
PUMP SER	VICE:	HW PUM	P					PUN	IP MODE	L			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: CWW/AJN

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	7739				BLDG	NAME:	MOVING	TARGE	T SIM BLI	DG .		
PER RAD	(SYSTE	M TAG) NO	: RAD)-1			RAD S	YS LOCA	TION:	MAINT. S	TORAGE	ROOM,	OFFIC
SO	JRCE OF	HEATING):				•	SERVES A	AREA:				:
RAD	IATION I	JNIT TYPE	: HW					% AREA	HTG:		2	0	
RADIA	TION	PUMF	•										
PUMP 1	ΓAG: <u>1</u>			PUM	P HP:	С	.08	PUMP	MFG:				
								PUMP M	ODEL:				
SCHED	ULE												
DA	YS SCH	EDULE NO):	11	-	MC	NTHS SC	CHEDULE	NO:		1		
SCHE	DULE C	OMMENTS	i:										
		SUN:	MON:	TUE:	WE	D: T	HUR:	FRI:	SAT:				
PRES S		0	0	0		0	0	0	0				
PRES		24	24	24		24	24	24	24				
REQ S		0	7	7				7	0				
REQ	STOP:	0	16	16		16	16	16	0				
MONTHS ON:	JAN:	FEB: I	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	-
ON.			X							\boxtimes	X	X	
CONTR	OLS												
TY	PE OF R	AD. CONT	ROLS:	ELECT	RIC								
	RADIA	TION CON	TROL:										
	oco	C HT SPAC	CE SP:		0								
		C HT SPAC			0			R	ESET C	ONTROL:	N		
	CONTR	OL COMM	ENTS:										_

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: CWW/AJN

BLDG NUMBER: 7739)	BLDG NAME:	MOVING TARGET SIM BLD	G
REF. UNIT NUMBER/TAG	G: CH-1		LOCATION (MER#):	EAST EXTERIOR OF BL
		 '	AHU'S SERVED:	AHU-1
UNIT	TYPE AIR COOLED	CONDENSING	UNIT, DX	
NAMEPLATE	<u> </u>			
CHILLER MFG:	TRANE		TOWER MFG:	
CHILLER MODEL:	RAUA-2006MA		# OF TOWER FANS:	3
CHILLER SERIAL NO:	3H-16081	à à	TOWER FAN V:	200
CHILLER V:	200	0	TOWER FAN AMPS:	5.8
CHILLER AMPS:	89	9	TOWER FAN HP:	1
CHILLER PH:		3		
CHILLER CAP (TONS):	20	<u> </u>		
COMMENTS:				
SCHEDULE				
PRES STOP: 2	NTS: I: MON: TUE: 0 0 0 4 24 24		0 0 0 24 24 24	. 2
	0 7 7	7	$\frac{7}{2} = \frac{7}{12} = \frac{0}{2}$	
REQ STOP:	0 16 16	16 1	6 16 0	
MONTHS JAN: FEB	: MAR: APR: M	AY: JUN:	JUL: AUG: SEP: OC	T: NOV: DEC:
ON:				
CONTROLS				
TYPE OF CONT	ROLS: ELECTRIC			
CWS SET	POINT:	n'	CNWS SETPOINT:	0
CWS SET			CNWR SETPOINT:	0
PRESS L PRESS LITE PRESS GA CONTROLS CO	LOW: N TE	TEMP LITE HI: MP LITE LOW: EMP GAUGES:	N OTHER INDICATI	ORS:
JOH MOLD OF				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

	ANOAO					CHECKE		A
			BLDG:	7739		FILE:	7739.XLS	
	AIR	HANDLIN	G UNIT - HVAC	UPGRADE (OBSERVA	TIONS	***************************************	
AHU NO.:	AHU-1	LOCATIO	N (Rm) MER					
AHU TYPE:	MZ-3	MFG.:	TRANE CLIMATE (CHANGER	MODEL:	TYPE 14		
SZ - Single Zone	H&V - He	ating & Vntltno	j. FC - F	an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	oe)	
MZ - Mulitzone	VAV - Var	iable Air Vol.	RHT -	Reheat System				
DD - Dual Duct	¡UH - Unit	Heater	IND -	Induction System				
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	X
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
E.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
F. & B. DAMPER	N/A: X	ОК:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
ZONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
COMMENTS:	OA & RA	DAMPERS DI	SCONNECTED AND V	VIRED WITH OAS			DPR-ACT = Damp	er Actuator
			DAMPERS DISCONN				RP-ACT = Replace	
							na -no i = neplao	, , iotualUl
FILTER SECTION	N/A:	OK: X	REPLACE:	ISIZE:				
COMMENTS:		1		12,55				
· · · · · · · · · · · · · ·								
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITS:	·····		
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN		5 HP		
INLET VANES	N/A: X	OK:	COMMENTS:	JOOMINEN	(10.	0111		
RETURN AIR FAN	OK:	1	FAN BEARINGS:	COMMEN	ITC:	N/A		<u> </u>
RETURN FAN MOTOR	OK:	REPLACE			COMMENTS:			
COMMENTS:		INEFEACE		COMMEN	110.			
COMMENTS.					77.55			
								-
	IN/A·	IOK: X	TREDIACE:	ICI7E:	CNITIVIV	TOK:	IDD ACT	Inn nn
COOLING COIL	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
COOLING COIL HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT:	RP-BD
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: X	OK: X	REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT:	RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X	OK: X	REPLACE:	SIZE:	CNTLVLV	ок:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X DX COIL	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A: X N/A: X DX COIL	OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL	N/A: N/A: X N/A: X DX COIL	OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: X N/A: X DX COIL ELECTRIC	OK: X OK: OK: CACTUATOR	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace B	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X DX COIL ELECTRIC	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: S REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace B	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: X N/A: X DX COIL ELECTRIC	OK: X OK: OK: CACTUATOR	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace B	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X DX COIL ELECTRIC	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: S REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace B	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X N/A: X DX COIL ELECTRIC	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: S REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace B	RP-BD RP-BD RP-BD
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: X N/A: X DX COIL ELECTRIC	OK: X OK: OK: OK: OK: CACTUATOR OK: X OK: X	REPLACE: REPLACE: S REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV BEARING G	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace E	RP-BD RP-BD RP-BD Actuator
COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: X N/A: X DX COIL ELECTRIC	OK: X OK: OK: OK: OK:	REPLACE: REPLACE: S REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT: RP- ACT = Replace RP-BD = Replace B	RP-BD RP-BD RP-BD Actuator

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

HILLER / EQUIP. NO.		CH-1	QUIPMEN LOCATION		OUTSIDE			
REFG. EQUIP. TYPE:		ACCU	MFG.:	TRANE		MODEL:	RAUA 20	
C-WCT = Centrifugal w/ V	Vater Side Co				eciprocating w			
R-WCT = Reciprocating w	/ Water Side	Cooling Town	er	ASB-WCT =	Absorption w/	Water Side	Cooling To	ower
ACCU = Air Cooled Cond	ensing Unit	·		CT = Cooling	Tower			
COMP. MOTOR	N/A:	OK: X	REPLACE:		SIZE:			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			
COMMENTS:								
			15-2		Totat:			
COOLING TOWER	N/A: X	OK:	REPLACE:		SIZE:			
AIR COOLED COND.	N/A:	OK: X	REPLACE:		SIZE:			
COMMENTS:								
					TEATULATED	OLIANITITY	7.	
CHILLER INSUL.	N/A: X	OK:	MISSING:		ESTIMATED			4' AT 2-1/2"
CHW PIPE INSUL.	N/A:	OK:	MISSING:	Х	JESTIMATED	QUANTIT	<u> </u>	4 A1 Z-1/Z
COMMENTS:								
								
OUNT DUND MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR CHW PUMP SEALS	IN/A. A		REPLACE:		SIZE:			
	N/A:	OK:			0.55			
CHW PUMP SEALS	N/A: N/A:	OK:	REPLACE:		SIZE:			~
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A:	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE:		SIZE:			
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: N/A: N/A:	OK:	REPLACE:		SIZE:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY: CHECKED BY:

AJN AJN

BLDG: **7739** FILE: 7739.XLS

STM - Steam	O.	BLR-1 HW	LOCATION (RM) MFG.: CRAN	MER E MODEL: 200-385		
CONVERTER TYPE: STM - Steam			MFG.: CRAN	E MODEL 200 205		
STM - Steam				L [WODEL. 200-305]		
		N/A	MFG.:	MODEL:		
II IVAI I I 4 VAI 4			ot Water Conv.	HTHW/STM - High Temp HW to Steam Convertor		
HW - Hot Water			p. HW to HW Cv.	DHW - Domestic Hot Water Convertor		
BOILER BURNER	ATMOSP	HERIC: X	POWER:	OK: X REPLACE:		
COMMENTS:						
	······································					
DI D DUMB MOTOD	Ilaira V	Tau				
BLR PUMP MOTOR BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:		
	N/A: X	OK:	REPLACE:	SIZE:		
COMMENTS:						
BLR INSULATION	N/A:	OK: X	MISSING:	TECTIMATED QUANTITY		
PIPE INSULATION	N/A:	IOK:	MISSING: X	ESTIMATED QUANTITY:		
COMMENTS:		ĮON.	IMISSING: X	ESTIMATED QUANTITY: 12' OF 1-1/2		
	70					
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: (B&G) PERIMETER RADIATION PUMP		
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
HW PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:						
CV PUMP MOTOR	N/A:	OK:	REPLACE:	SIZE:		
OV PUMP SEALS	N/A:	OK:	REPLACE:	SIZE:		
COMMENTS:	<u> </u>			VIGE.		
OV INSULATION	N/A:	JOV.	Threenic			
77 INSULATION	N/A:	OK:	MISSING:	ESTIMATED QUANTITY:		
V PIPE INSUL.	IIIWA.	OK:	MISSING:	ESTIMATED QUANTITY:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/17/94 PREPARED BY: AJN/CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 6620

BLDG NAME: COMMUN ACT CTR

ELECTRIC METER: Y

CONDITIONED SQFT:

31,740

GAS METER: SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO:

MON: SUN:

TUE: 0 0 0 24 24 24 7 0 7

16

11,

THUR: WED: 0 24

16

16

FRI: 0 24 7

16

0 0 24 24 0 16 0

SAT:

REMARKS:

PRES START:

PRES STOP:

REQ START:

REQ STOP:

BLDG. CONTACT: MACK MCMULLEN @ 239-9532 OR 9533

0

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE:** 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER		AHU LOCATION: MEF	₹
REFRIG SYS # SRVNG A	HU: CH-1	SERVES AREA: WEST	WING
,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		DG AREA HEATED:	32
AHU UNIT TYPE MULT	IZONE	NUMBER	OF ZONES IF MZ UNIT: 7
CFM-HTG:	12,910	CFM-CLG:	12,910
MIN %OA:	10	MAX %OA:	100
NAMEPLATE			
UNIT MFG:		UNIT MODI	EL:
SUPPLY FAN HP:	7.5	RET/EXH FAN I	1P: 0
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR ME	
SUPPLY FAN MTR MODEL:	Y149924A1LL	RET/EXH FAN MTR MODI	<u> </u>
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL: HUMIDIFIER:	NONE NONE		
COOLING COIL:		—— 🛱	
SCHEDULE		· · · · · · · · · · · · · · · · · · ·	
DAY SCHEDULE NO: SCHEDULE COMMENTS:	60	MON'	TH SCHEDULE NO: 3
SUN:	MON: TUE: WED:	THUR: FRI: SAT:	White the state of
PRES START: 0	7 7 7	7 7 0	
PRES STOP: 0	16 16 16	16 16 0	
REQ START: 0	7 7 7	7 7 0	
REQ STOP: 0	16 16 16	16 16 0	
MONTHS JAN: FEB:	MAR: APR: MAY: JUN	N: JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT	TYPE: SINGLE SETPOINT
		HOT DECK I	
PRESENT TEMP WINTE PRESENT TEMP WINTR U		COLD DECK I	DEG F: 0
FRESENT TEMP WINTER O	1000	MIXED AIR [DEG F: 0
PRESENT TEMP SUM U		OTHER SETPOINT DES	
MIN OA DMPR CONTROL	.: N MIXED AIR DMF	PR CONTROL: Y IMPLE	MENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL	.: Y ECONOMIZER D		TIME CLOCK: Y
RET AIR DMPR CONTROL	.: Y ECONOMIZER W	/B CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL	.: N		
OTHER CONTROLS D			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001

DATE: 10/17/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

AIN II/	ANDEING GIAIT G	OKVET OBSET	WATIONO
BUILDING NUMBER	: 6620		
AHU NUMBER	: AHU-2	AHU LOCATION: M	ER
REFRIG SYS # SRVNG AF	IU: CH-1	SERVES AREA: BAL	L ROOM
REFRIG 515 # SKVING AF	<u> </u>	OG AREA HEATED:	23
	,,,,,,		
AHU UNIT TYPE SINGL	E ZONE .	NUMBE	R OF ZONES IF MZ UNIT: 0
CFM-HTG:	9,600	CFM-CLG:	9,600
MIN %OA:	30	MAX %OA:	100
NAMEPLATE			
UNIT MFG:	TRANE	UNIT MC	DDEL: TYPE 21
SUPPLY FAN HP:	7.5	RET/EXH FA	
SUPPLY FAN MTR MFG:	GENERAL MOTOR	RET/EXH FAN MTR	MFG:
SUPPLY FAN MTR MODEL:	B-2222A	RET/EXH FAN MTR MC	DDEL:
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve	e?
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
SCHEDULE			
-	60	MC	ONTH SCHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS:	00	IVIC	SNITT SCHEDOLE NO. 3
SUN:		HUR: FRI: SAT:	
PRES START: 0	$\frac{7}{2} = \frac{7}{2} = \frac{7}{2} = \frac{7}{2}$	$\frac{7}{10} = \frac{7}{10} = \frac{0}{10}$	
PRES STOP: 0	16 16 16	16 16 0	
REQ START: 0	$\frac{7}{10} = \frac{7}{10} $	$\frac{7}{16}$ $\frac{7}{16}$ $\frac{0}{16}$	
REQ STOP: 0	16 16 16	16 16 0	
	MAR: APR: MAY: JUN	: JUL: AUG: SER	P: OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONT	ROLS: PNEUMATIC	THERMOST	AT TYPE: SETBACK
		HOT DEC	K DEG F: 0
PRESENT TEMP WINTE		COLD DEC	K DEG F: 0
PRESENT TEMP WINTR U	NOCC: 0	MIXED A	R DEG F: 0
PRESENT TEMP SUN	N OCC: 0	OTHER SETPOINT I	DESCRIP:
PRESENT TEMP SUM U	NOCC: 0	OTHER SETPOIN	T DEG F: 0
MIN OA DMPR CONTROL	.: N MIXED AIR DMP	R CONTROL: Y IMI	PLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL	.: Y ECONOMIZER D	B CONTROL: Y	TIME CLOCK: Y
RET AIR DMPR CONTROL	.: 📉 ECONOMIZER W	B CONTROL: N	TIME CLOCK OPERATIONAL? Y
EXH AIR DMPR CONTROL	.: N		
OTHER CONTROLS D	Fech.		
OTHER CONTROLS D			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE**: 10/17/94

PREPARED BY: AJN/CWW

BUILDING NUMBER AHU NUMBER		AHU LOCATION: ME	₹
DEEDIC EVE # EDVAIC AL		-	
REFRIG SYS # SRVNG AF		SERVES AREA: KITCH GAREA HEATED:	14.
AHU UNIT TYPE HEATI	NG AND VENTILATING	NUMBER	OF ZONES IF MZ UNIT: 0
CFM-HTG:	10,500	CFM-CLG:	0
MIN %OA:	100	MAX %OA:	100
NAMEPLATE			
UNIT MFG:	TRANE	UNIT MOD	EL: 21
SUPPLY FAN HP:	5	RET/EXH FAN	HP: 0
SUPPLY FAN MTR MFG:	MARATHON	RET/EXH FAN MTR M	
SUPPLY FAN MTR MODEL:	1AS15TVR26BDW	RET/EXH FAN MTR MOD	EL:
COMMENTS:			
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE		
HEATING COIL:	STEAM		
REHEAT COIL:		📙	
HUMIDIFIER:	NONE	— <u>-</u>	
COOLING COIL:	NONE	⊔	
SCHEDULE			
DAY SCHEDULE NO:	60	MON	TH SCHEDULE NO: 1
SCHEDULE COMMENTS:			·
SUN:	MON: TUE: WED: TH	IUR: FRI: SAT:	
PRES START: 0	7 7 7 7	7 7 0	•
PRES STOP: 0	16 16 16	16 16 0	
REQ START: 0	7 7 7	7 7 0	
REQ STOP: 0	16 16 16	16 16 0	
MONTHS JAN: FEB: M	MAR: APR: MAY: JUN:	JUL: AUG: SEP:	OCT: NOV: DEC:
ON:			
CONTROLS			
TYPE OF CONTI	ROLS: PNEUMATIC	THERMOSTAT	
PRESENT TEMP WINTR	OCC: 0	HOT DECK	
PRESENT TEMP WINTR UN	NOCC: 0	COLD DECK MIXED AIR	
PRESENT TEMP SUM	occ: 0	OTHER SETPOINT DE	
PRESENT TEMP SUM UN		OTHER SETPOINT	
MIN OA DMPR CONTROL:	N MIXED AIR DMPR	CONTROL: Y IMPL	EMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL:			TIME CLOCK: Y
RET AIR DMPR CONTROL:			TIME CLOCK OPERATIONAL? Y
EXH AIR DMPR CONTROL:		 	
OTHER CONTROLS DE	SCR·		
CONTROLS COMMI			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

TION EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: AJN/CWW

AIR II	ANDLING UNIT SU	JRVEY OBSERVATIONS	
BUILDING NUMBE	R: 6620		-
AHU NUMBE	R: AHU-4	AHU LOCATION: MER	
REFRIG SYS # SRVNG A	HU: CH-1	SERVES AREA: DINNING ROOM	
	% OF BLDG	G AREA HEATED: 23	
AHU UNIT TYPE SING	LE ZONE	NUMBER OF ZONES IF MZ UNIT: 0	
CFM-HTG:	8,800	CFM-CLG: 8,800	
MIN %OA:	34	MAX %OA: 100	
NAMEPLATE			
UNIT MFG:	TRANE	UNIT MODEL: 21	_
SUPPLY FAN HP:		RET/EXH FAN HP: 0	
SUPPLY FAN MTR MFG:		RET/EXH FAN MTR MFG:	
SUPPLY FAN MTR MODEL: COMMENTS:		RET/EXH FAN MTR MODEL:	
COILS			
Coil	Coil Type	Modulating Valve?	
PREHEAT COIL:	NONE	n	
HEATING COIL:	STEAM		
REHEAT COIL:	NONE		
HUMIDIFIER:	NONE		
COOLING COIL:	CW		
CHEDULE			
DAY SCHEDULE NO:	60	MONTH SCHEDULE NO: 3	_
SCHEDULE COMMENTS:			
SUN:		UR: FRI: SAT:	
PRES START: 0	$\frac{7}{12} = \frac{7}{12} = \frac{7}{12} = \frac{7}{12}$	7 0	
PRES STOP: 0 REQ START: 0	<u>16</u> <u>16</u> <u>16</u> <u>7</u>	<u>16</u> <u>16</u> <u>0</u>	
REQ STOP: 0	$\frac{7}{16} \frac{7}{16} \frac{7}{16} \frac{7}{16}$	$\frac{7}{16} \frac{7}{16} \frac{0}{0}$	
		10 0	
MONTHS JAN: FEB: I ON:	MAR: APR: MAY: JUN:	JUL: AUG: SEP: OCT: NOV: DEC:	
ONTROLS			_
TYPE OF CONT	ROLS: PNEUMATIC	THERMOSTAT TYPE: SINGLE SETPOINT	
PRESENT TEMP WINTR	ROCC: 0	HOT DECK DEG F: 0	
PRESENT TEMP WINTR U	NOCC: 0	COLD DECK DEG F: 0 MIXED AIR DEG F: 0	
PRESENT TEMP SUM	MOCC: 0	OTHER SETPOINT DESCRIP:	
PRESENT TEMP SUM UN	NOCC: 0	OTHER SETPOINT DEG F: 0	
MIN OA DMPR CONTROL	: N MIXED AIR DMPR	CONTROL: N IMPLEMENT DEMAND LIMIT CNTRLS?	Υ
MAX OA DMPR CONTROL		CONTROL: Y TIME CLOCK:	Y
RET AIR DMPR CONTROL		CONTROL: N TIME CLOCK OPERATIONAL?	Υ
EXH AIR DMPR CONTROL	: N		
OTHER CONTROLS DI			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 **DATE:** 10/17/94

PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER:	6620	BOILER RM LOCATION: MER
BOILER UNIT		
SOURCE OF BLDG HE	BLR/CONVERT	TER SERVES AREA OR SERVICE: ALL
	AI	
● BOILER	51.5.4	CONVERTER
	BLR-1	CONVERTER TAG:
	LOW PRESS STEAM (<15#) NAT. GAS	CONVERTER TYPE: CONV HT SOURCE:
. 0221112	TAT. OAG	CONV HT SOURCE:
CENTRAL PLANT	DIRECT	
NAMEPLATE		% AREA HEATED BY BB RADIATION:
BOILER MFG: CLEAVER	R-BROOKS	BLR CAP OUTPUT (BTUH): 4,520,000
UNIT MODEL: 153-700-45	520	BLR CAP INPUT (BTUH): 5,736,000
COMMENTS:		
SCHEDULE		
CHEDULE		
DAYS SCHEDULE NO: SCHEDULE COMMENTS:	11	MONTH SECHDULE NO: 1
SUN:	MON: TUE: WE	ED: THUR: FRI: SAT:
PRES START: 0	0 0	0 0 0 0
PRES STOP: 24 REQ START: 0	$\frac{24}{7} = \frac{24}{7} = \frac{24}{7}$	24 24 24 24
REQ STOP: 0		$\frac{7}{16} = \frac{7}{16} = \frac{7}{16} = \frac{0}{0}$
		10 10 0
MONTHS JAN: FEB:	MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
ON: ☑		
ONTROLS		
TYPE OF BLR CON	ITROLS: PNEUMATIC/E	ELECTRIC RESET CONTROLS: Y
OPERATING SE		DEG F or PSIG
TYPE OF BURNER CON	ITROLS:	
CONTROLS COM	MENTS:	
IW PUMP	<u> </u>	
PUMP TAG: 1	PUMP HP:	1.5 PUMP MFG:
PUMP SERVICE: HW PUM		PUMP MODEL:
W PUMP		
PUMP TAG: 2	PUMP HP:	0.5 PUMP MFG:
PUMP SERVICE: HW PUM		PUMP MODEL:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94

PREPARED BY: AJN/CWW

PERIMETER RADIATION SURVEY OBSERVATIONS

BLDG NU	MBER:	6620				BLDG	NAME:	СОММИ	N ACT C	TR			
PER RAD	(SYSTE	M TAG) N	O: RAI	D-1	· · · · · · · · · · · · · · · · · · ·		RADS	YS LOCA	ATION:	RMS-103	,106,109	,11,114,11	5,116
so	URCE O	F HEATIN	IG: BLF	₹-1			\$	SERVES .	AREA:				
RAI	NOITAIC	UNIT TYF	E: HW					% AREA	HTG:			8	
RADIA	TION	PUM	Р									_	
PUMP	TAG: 1			PUN	IP HP:		0.5	PUMP	MFG:				
								PUMP M	ODEL:				
SCHE	DULE												
DA	YS SCH	EDULE N	0:	11	-	MO	NTHS SC	HEDULE	NO:		1		
SCHE	EDULE C	OMMENT	s:										_
		SUN:	MON:	TUE	WE	D: Th	IUR:	FRI:	SAT:				
PRES S	START:	0	0	0		0	0	0	0				
:	STOP:	24	24	24		24	24	24	24				
	START:	0	7	7		7			0				
REQ	STOP:	0	16	16		16	16	16	0				
MONTHS ON:	JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
O.V.		X	X	\boxtimes						\boxtimes	\boxtimes	\boxtimes	
CONTR	ROLS												
TY	PE OF R	AD. CON	TROLS:	ELECT	RIC								
	RADIA	TION COI	NTROL:										
	oc	C HT SPA	CE SP:		0								
		C HT SPA			0			R	ESET CO	ONTROL:	N		
	CONTR	OL COM	MENTS:				-						

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/17/94 PREPARED BY: AJN/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

CHILLER MFG: TSI	BLDG NUMBER: 6620	BLDG I	NAME: COMMUN ACT CTR	ODOLINATIONO
NAMEPLATE CHILLER MFG: TSI	REF. UNIT NUMBER/TAG	3: CH-1	LOCATION (MER#): MFR
NAMEPLATE				
CHILLER MFG: TSI	רואט	TTYPE AIR COOLED CONDE	NSING UNIT W/ CHW	
CHILLER MODEL: SC2CM130SP # OF TOWER FANS: 12 CHILLER SERIAL NO: 8723-2 TOWER FAN V: 0 CHILLER AMPS: 237 CHILLER AMPS: 237 CHILLER CAP (TONS): 130 COMMENTS: COMMEN	NAMEPLATE			
CHILLER MODEL: SC22CM130SP # OF TOWER FANS: 12 CHILLER SERIAL NO: 5723-2 TOWER FAN V: 0 CHILLER V: 460 TOWER FAN MPS: 0 CHILLER PH: 3 CHILLER CAP (TONS): 130 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 11 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS: FRES START: 0 0 0 0 0 0 0 0 0 SCHEDULE COMMENTS: PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24	CHILLER MFG:	TSI	TOWER MFG:	TSI
CHILLER SERIAL NO: 8723-2 CHILLER AMPS: 237 CHILLER AMPS: 237 CHILLER CAP (TONS): 130 COMMENTS: DAYS SCHEDULE NO: 11 MONTHS SCHEDULE NO: 2 SCHEDULE DAYS SCHEDULE NO: 11 MONTHS SCHEDULE NO: 2 PRES START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHILLER MODEL:	SC2CM130SP		
CHILLER AMPS: 237 CHILLER PH: 3 CHILLER CAP (TONS): 130 COMMENTS: COMMENTS: COMMENTS: COMMENTS: COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 REQ START: 0 7 7 7 7 7 7 7 7 8 PRES STOP: 0 16 16 16 16 16 16 0 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: ON: OR OR OR OR OR OR OR OR OR OR OR OR OR	CHILLER SERIAL NO:	8723-2	TOWER FAN V:	
CHILLER PH: 3 CHILLER CAP (TONS): 130 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 11 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS: PRES START: 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24		460	TOWER FAN AMPS:	0
CHILLER CAP (TONS): 130 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 11 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS: PRES START: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			TOWER FAN HP:	1
DAYS SCHEDULE NO: 11				
DAYS SCHEDULE NO: 11 MONTHS SCHEDULE NO: 2 SCHEDULE COMMENTS: DAYS SCHEDULE COMMENTS: 11 MONTHS SCHEDULE NO: 2 2 2 2 2 2 2 2 2 2	CHILLER CAP (TONS):	130		
DAYS SCHEDULE NO: 11				
SCHEDULE COMMENTS:	SCHEDULE			
PRES START: 0 0 0 0 0 0 0 0 0 0 PRES STOP: 24 24 24 24 24 24 24 24 24 24 24 24 24			MONTHS SCHEDU	LE NO: 2
ON: ON: ON: ON: ON: ON: ON: ON: ON: ON:	PRES START: 0 PRES STOP: 22 REQ START: 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c cccc} & 0 & 0 & 0 \\ & 24 & 24 & 24 \\ \hline & 7 & 7 & 0 \end{array}$	
TYPE OF CONTROLS: ELECTRIC CWS SETPOINT: 42 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N TEMP LITE LOW: N TEMP GAUGES: N CONTROLS COMMENTS: W and CNW PUMPS PUMP TAG: 1 PUMP HP: 7.5 PUMP MFG: GOULD PUMP MODEL: 6330778-03 W and CNW PUMPS PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD GOULD PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD	ON:			
CWS SETPOINT: 42 CNWS SETPOINT: 0 CWR SETPOINT: 0 CNWR SETPOINT: 0 PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: Y TEMP GAUGES: N CONTROLS COMMENTS: CW AND CNW PUMPS PUMP TAG: 1 PUMP HP: 7.5 PUMP MFG: GOULD JMP SERVICE: CW PUMP (Chilled Water) PUMP MODEL: 6330778-03 PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD	ONTROLS			
CWR SETPOINT: PRESS LITE HI: PRESS LITE LOW: PRESS GAUGES: TEMP LITE HI: PRESS GAUGES: TEMP GAUGES: N CONTROLS COMMENTS: W and CNW PUMPS PUMP TAG: TEMP HP: T.5 PUMP MFG: GOULD PUMP MODEL: G330778-03 PUMP TAG: PUMP TAG: PUMP TAG: PUMP MODEL: TEMP GAUGES: PUMP MFG: GOULD PUMP MODEL: TEMP GAUGES: TEMP MFG: TEMP MFG: TEMP MFG: TEMP GAUGES: TEMP MFG: TEMP GAUGES: TEMP GAUGES: TEMP GAUGES: TEMP GAUGES: TEMP MFG: TEMP	TYPE OF CONTR	OLS: ELECTRIC		
CWR SETPOINT: PRESS LITE HI: PRESS LITE LOW: PRESS GAUGES: PRESS GAUGES: TEMP LITE HI: PRESS GAUGES: TEMP GAUGES: N CONTROLS COMMENTS: W and CNW PUMPS PUMP TAG: PUMP TAG: PUMP (Chilled Water) PUMP MODEL: G330778-03 PUMP TAG: PUMP TAG: PUMP MODEL: GOULD PUMP MODEL: G300778-03	CWS SETP	OINT: 42	CNWS SETPOINT:	0
PRESS LITE HI: N TEMP LITE HI: N OTHER INDICATIORS: PRESS LITE LOW: N TEMP LITE LOW: N PRESS GAUGES: Y TEMP GAUGES: N CONTROLS COMMENTS: W and CNW PUMPS PUMP TAG: 1 PUMP HP: 7.5 PUMP MFG: GOULD PUMP SERVICE: CW PUMP (Chilled Water) PUMP MODEL: 6330778-03 W and CNW PUMPS PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD PUMP MODEL: 6300778-03	CWR SETP			
PUMP TAG: 1 PUMP HP: 7.5 PUMP MFG: GOULD JMP SERVICE: CW PUMP (Chilled Water) PUMP MODEL: 6330778-03 W and CNW PUMPS PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD	PRESS LITE	LOW: N TEMP LITE	LOW: N	
PUMP TAG: 1 PUMP HP: 7.5 PUMP MFG: GOULD UMP SERVICE: CW PUMP (Chilled Water) PUMP MODEL: 6330778-03 W and CNW PUMPS PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD	CONTROLS CO	MMENTS:		
PUMP SERVICE: CW PUMP (Chilled Water) PUMP MODEL: 6330778-03 PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD	W and CNW PU	JMPS		
PUMP MODEL: 6330778-03 W and CNW PUMPS PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD	PUMP TAG: 1	PUMP HP:	7.5 PHMP MEG:	GOULD
PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD	UMP SERVICE: CW PUMP			
PUMP TAG: 2 PUMP HP: 7.5 PUMP MFG: GOULD			. O.M. MODEL.	0000110-00
MD CEDWOL. OWNER OF THE CONTRACTOR OF THE CONTRA			7.5 PUMP MFG:	GOULD
	JMP SERVICE: CW PUMP	(Chilled Water)	PUMP MODEL:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

FILE:

12 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

6620.XLS

AHU-1	LOCATIO	V (Rm) MER B	ASEMENT				
MZ-7	MFG.:	. (MODEL:	TYPE 25		
						e)	
!			•			,	
I			•				
				DPR-ACT	OK: X	RP- ACT:	
- 31		REPLACE:	SIZE:	DPR-ACT	ок: х	RP- ACT:	
N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ок:	RP- ACT:	
AHU BOD	Y IS RUSTED					DPR-ACT = Dampi	er Actuator
						RP-ACT = Replace	Actuator
N/A:	OK: X	REPLACE:	SIZE:				
OK: X	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
OK: X	REPLACE		COMMEN	ITS:			**
N/A: X	OK:	COMMENTS:					······
OK:			COMMEN	ITS:	N/A		······································
	1			···			
-							
JIN/A:	Tok: X	TREPLACE:	ISIZE:	CNTLVLV	NOK: X	IRP- ACT:	RP-BD:
N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV CNTLVLV	OK: X	RP- ACT:	RP-BD:
N/A: N/A: N/A: X	OK: X OK: X	REPLACE: STEAM REPLACE:					. I
N/A:	OK: X	STEAM	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
N/A: N/A: X	OK: X	STEAM REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT:	RP-BD: RP-BD: RP-BD:
N/A: N/A: X	OK: X	STEAM REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: Actuator
N/A: N/A: X	OK: X	STEAM REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: N/A: X	OK: X	STEAM REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: X N/A: X N/A: X	OK: X	STEAM REPLACE:	SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: N/A: X N/A: X	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: X N/A: X N/A: X	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: X N/A: X N/A: X	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: X N/A: X N/A: X	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	STEAM REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: X N/A: X N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	STEAM REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
N/A: X N/A: X N/A: X	OK: X OK: OK: OK:	STEAM REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD: RP-BD: Actuator
	H&V - Heaver - Heaver - Heaver - Variable -	MZ-7 MFG.: H&V - Heating & Vntltng VAV - Variable Air Vol. UH - Unit Heater N/A: OK: X N/A: OK: X N/A: OK: N/A: OK: N/A: OK: N/A: OK: N/A: OK: OK: N/A: OK: OK: AHU BODY IS RUSTED N/A: OK: X OK: REPLACE	MZ-7 MFG.: TRANE CLIMATE CHAPTER CHAPT	MZ-7 MFG.: TRANE CLIMATE CHANGER H&V - Heating & Vntltng. VAV - Variable Air Vol. UH - Unit Heater N/A: OK: X REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: N/A: OK: REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: SIZE: OK: X REPLACE: COMMENTS: OK: REPLACE: COMMENTS: OK: REPLACE FAN BEARINGS: COMMENTS:	MZ-7 MFG.: TRANE CLIMATE CHANGER MODEL: H&V - Heating & Vntltng. VAV - Variable Air Vol. UH - Unit Heater IND - Induction System IND - I	MZ-7 MFG.: TRANE CLIMATE CHANGER MODEL: TYPE 25 H&V - Heating & Vntltng. VAV - Variable Air Vol. UH - Unit Heater N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X N/A: OK: REPLACE: SIZE: DPR-ACT OK: X N/A: OK: REPLACE: SIZE: DPR-ACT OK: X N/A: OK: REPLACE: SIZE: DPR-ACT OK: X N/A: OK: REPLACE: SIZE: DPR-ACT OK: OK: X N/A: OK: REPLACE: SIZE: DPR-ACT OK: OK: OK: OK: OK: OK: OK: OK: OK: OK:	MZ-7 MFG.: TRANE CLIMATE CHANGER MODEL: TYPE 25 H&V - Heating & Vntltrig. VAV - Variable Air Vol. UH - Unit Heater N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X RP- ACT: N/A: OK: X REPLACE: SIZE: DPR-ACT OK: X RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: N/A: OK: REPLACE: SIZE: DPR-ACT OK: RP- ACT: OK: RP- ACT: DARRA RP- ACT: DARRA RP- ACT: DARRA RP- ACT: DARRA RP- ACT: DOWN-ACT: DOWN-ACT: DOWN-ACT: DARRA RP- ACT: DARRA RP-

6620

BLDG:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

							DBI:	A
				6620		FILE:	6620.XLS	
			NG UNIT - HVAC	UPGRADE	OBSERVA	TIONS		
AHU NO.:	AHU-2	LOCATION	, ,					
AHU TYPE:	SZ	MFG.:	TRANE CLIMATE C		MODEL:	TYPE 21		
SZ - Single Zone		eating & Vntltr		an Coil (Indicate	2P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone	1	ıriable Air Vol.		Reheat System				
DD - Dual Duct	UH - Unit	Heater	IND - ir	nduction Systen	n			
O.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK: X	RP-ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
F. & B. DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	PLENUM	RETURN KI	TCHEN AREA				DPR-ACT = Dam	per Actuator
							RP-ACT = Replac	
FILTER SECTION	N/A:	JOK: X	REPLACE:	ISIZE:				
COMMENTS:	<u> </u>	101/1 /	INCI DAGE.	LOIZE.		V-1		
SUPPLY AIR FAN	ОК:	REPLACI	FAN BEARINGS: X	COMMEN	NTS:			
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN				
INLET VANES	N/A: X	lok:	COMMENTS:	Tooming				
RETURN AIR FAN	OK:		FAN BEARINGS:	COMMEN	VITS:	N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMMEN		IV/A		
COMMENTS:				TOOMINIE	V10.			
							· · · · · · · · · · · · · · · · · · ·	
			W. W					
COOLING COIL	IN/A:	Ιοκ: x	IREPLACE:	SIZE:		IOK: A	IDD ACT.	Inn no
	N/A: N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	
COOLING COIL HEATING COIL PREHEAT COIL		OK: X OK: X	STEAM	SIZE:	CNTLVLV CNTLVLV	ок: х	RP- ACT:	RP-BD RP-BD
HEATING COIL PREHEAT COIL	N/A:	OK: X		SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT:	RP-BD
HEATING COIL	N/A: N/A:	OK: X	STEAM REPLACE:	SIZE:	CNTLVLV CNTLVLV	ок: х	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	STEAM REPLACE:	SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	STEAM REPLACE:	SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A:	OK: X	STEAM REPLACE:	SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL	N/A: N/A:	OK: X	STEAM REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A:	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: WHU PUMP MOTOR WHU PUMP SEALS	N/A: N/A: N/A:	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A:	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: WHU PUMP MOTOR WHU PUMP SEALS	N/A: N/A: N/A:	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A:	OK: X OK: OK:	STEAM REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A: X	OK: X OK: OK: OK:	STEAM REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLY	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
PREATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: OK: OK:	STEAM REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD
PREHEAT COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS: PIPE INSULATION OUCT INSULATION	N/A: N/A: N/A: N/A: N/A: X N/A: X	OK: X OK: OK: OK:	STEAM REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV CNTLVLY	OK: X OK:	RP- ACT: RP- ACT: RP- ACT: RP-ACT = Replace	RP-BD RP-BD RP-BD

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY: CHECKED BY: CWW AJN

BLDG:

6620

FILE:

6620.XLS

	AID	LANDI IN	BLDG:	VAC LIDO	DADE O	DCEDI/A	FILE:	6620.XLS	
4.11.10			G UNIT - H	MEZZANINE	KAUE U	DOEKVA	IION2		
AHU NO.:	AHU-3	LOCATIO	N (Rm)	MEZZANINE		INODEL			
AHU TYPE:	H&V	MFG.:		EO E 0.9	/IP1 - OI	MODEL:	4D for 4 Dire		
SZ - Single Zone		ating & Vntltng] .	i	•	P for 2 Pipe or	4P for 4 Pip	e)	
MZ - Mulitzone		iable Air Vol.		RHT - Reheat	•				
DD - Dual Duct	UH - Unit		lacal Loc	IND - Induction		IDDD 40T	Tor. V	IDD AOT	
O.A. DAMPER	N/A:	OK: X	REPLACE:		SIZE:	DPR-ACT	OK: X	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:		SIZE:	DPR-ACT	OK: X OK:	RP- ACT:	
E.A. DAMPER	N/A:	OK:	REPLACE:		SIZE:	DPR-ACT	OK: X	RP- ACT:	
F. & B. DAMPER	N/A:	OK: X	REPLACE:	1	SIZE:	DPR-ACT DPR-ACT	OK: X	RP- ACT:	
ZONE DAMPER	N/A:	OK:	REPLACE:		SIZE:		JUN:		
COMMENTS:			AHU. DAMPE		NG SENSO	RS		DPR-ACT = Damp	
	ON ACTU	ATORS ARE	NOT FUNCTION	NING				RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:		SIZE:				
COMMENTS:		1							
SUPPLY AIR FAN	IOK: X	IREPLACE	FAN BEARING	S: T	COMMENT	S:			
SUPPLY FAN MOTOR	OK: X	REPLACE			COMMENT				
INLET VANES	N/A: X	OK:	COMMENTS	1					
RETURN AIR FAN	OK:		FAN BEARING		COMMENT	S·			
RETURN FAN MOTOR	OK:	REPLACE			COMMENT				
	OK.	INCLUDE	••		COMMINICIA				
COMMENTS:									
									- 17
COOLING COIL	N/A: X	OK:	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	STEAM	I	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
REHEAT COIL	N/A: X	OK:	REPLACE:		SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:								RP-ACT = Replace	Actuator
								RP-BD = Replace	Body
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:				· · · · · · · · · · · · · · · · · · ·
AHU PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:				
COMMENTS:									
PIPE INSULATION	N/A:	OK: X	MISSING:		ESTIMATE	D QUANTITY:			
						D QUANTITY:			
DUCT INSULATION	N/A:	OK: X	MISSING:		ESTIMATE	D QUANTITY	·		
COMMENTS:									
					<u></u>				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

AHU NO.: AH AHU TYPE: SZ SZ - Single Zone H& MZ - Mulitzone VA' DD - Dual Duct UH O.A. DAMPER N/A E.A. DAMPER N/A E.A. DAMPER N/A E.A. DAMPER N/A COMMENTS: OLI COMMENTS: CO FILTER SECTION N/A COMMENTS: SUPPLY AIR FAN OK SUPPLY FAN MOTOR OK RETURN AIR FAN OK RETURN FAN MOTOR OK	IU-4 LC MF V - Heating 8 V - Variable A I - Unit Heate A: OF	WDLING OCATION (F OCAT	Rm) MEZ TRANE CLIMATE FC - RHT IND REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: BAD BEARING.	G620 ZANINE CHANGER Fan Coil (Indicate 2 - Reheat System Induction System SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: CHERE IS AN ABAI ATING & COOLING SIZE: COMMEN COMMEN	MODEL: 2P for 2 Pipe or DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT NDONED GCOIL.	TYPE 21	RP- ACT: RP- ACT: RP- ACT: RP- ACT: DPR-ACT = Dampe RP-ACT = Replace	
AHU NO.: AH AHU TYPE: SZ SZ - Single Zone H& MZ - Mulitzone VA' DD - Dual Duct UH O.A. DAMPER N/A E.A. DAMPER N/A E.A. DAMPER N/A E.A. DAMPER N/A COMMENTS: OLI COMMENTS: CO FILTER SECTION N/A COMMENTS: OK SUPPLY AIR FAN OK SUPPLY FAN MOTOR OK INLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	IU-4 LC MF V - Heating 8 V - Variable A I - Unit Heate A: OF	OCATION (FIFG.: & Vntltng. Air Vol. er K: X K: X K: K: K: K: K: K: K: EPLACE FA EPLACE: K:	Rm) MEZ TRANE CLIMATE FC - RHT IND REPLACE: REPLACE: REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE:	ZANINE CHANGER Fan Coil (Indicate 2 - Reheat System Induction System SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: CHERE IS AN ABAIATING & COOLING	MODEL: 2P for 2 Pipe or DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT NDONED GCOIL.	TYPE 21 4P for 4 Pipe OK: OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: DPR-ACT = Dampe RP-ACT = Replace	
AHU TYPE: SZ SZ - Single Zone H& MZ - Mulitzone VA DD - Dual Duct UH D.A. DAMPER N/A R.A. DAMPER N/A E.A. DAMPER N/A COMMENTS: OLI COMMENTS: CO FILTER SECTION N/A COMMENTS: OK SUPPLY AIR FAN OK NLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	Minus Minus	FG.: & Vntltng. Air Vol. er K: X K: X K: X K: K: FAN HAS A AHU MIDWA K: X EPLACE FA EPLACE: K:	TRANE CLIMATE FC - RHT IND REPLACE: REPLACE: REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE:	CHANGER Fan Coil (Indicate 2 - Reheat System - Induction System SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DONED GCOIL.	AP for 4 Pipe	RP- ACT: RP- ACT: RP- ACT: RP- ACT: DPR-ACT = Dampe RP-ACT = Replace	
SZ - Single Zone MZ - Mulitzone DD - Dual Duct O.A. DAMPER R.A. DAMPER E.A. DAMPER F. & B. DAMPER COMMENTS: CO FILTER SECTION COMMENTS: SUPPLY AIR FAN SUPPLY FAN MOTOR N/A RETURN AIR FAN OK RETURN FAN MOTOR OK MZ - MUlitzone N/A VA N/A N/A OK RETURN FAN MOTOR OK OK OK OK OK OK OK OK OK	V - Heating 8 V - Variable A I - Unit Heate A: OF A: OF A: OF A: OF CA:	& Vntltng. Air Vol. er K: X K: X K: X K: K K: FAN HAS A AHU MIDWA K: X EPLACE FA EPLACE: K:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE:	Fan Coil (Indicate 2 - Reheat System - Induction System SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DONED GCOIL.	AP for 4 Pipe	RP- ACT: RP- ACT: RP- ACT: RP- ACT: DPR-ACT = Dampe RP-ACT = Replace	
MZ - Mulitzone DD - Dual Duct UH O.A. DAMPER R.A. DAMPER E.A. DAMPER F. & B. DAMPER COMMENTS: CO FILTER SECTION COMMENTS: SUPPLY AIR FAN SUPPLY FAN MOTOR INLET VANES RETURN AIR FAN OK RETURN FAN MOTOR OK UH N/A VA N/A N/A N/A OK RETURN FAN MOTOR OK OK OK OK OK OK OK OK OK	V - Variable A I - Unit Heate A: OF A: OF A: OF A: OF A: OF CA: O	Air Vol. er K: X K: X K: K: K: FAN HAS A AHU MIDWA K: X EPLACE FA EPLACE: K:	RHT IND REPLACE: REPLACE: REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE:	- Reheat System - Induction System - SIZE:	DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT TS:	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: DPR-ACT = Dampe RP-ACT = Replace	
DD - Dual Duct	I - Unit Heate A: OF A: OF A: OF A: OF A: OF A: OF A: OF A: OF COMMENT OF COM	EFLACE FA	REPLACE: REPLACE: REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COOLING	DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT NDONED GCOIL.	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: DPR-ACT: DPR-ACT = Dampe RP-ACT = Replace	
O.A. DAMPER R.A. DAMPER R.A. DAMPER E.A. DAMPER F. & B. DAMPER ZONE DAMPER COMMENTS: CO FILTER SECTION COMMENTS: SUPPLY AIR FAN SUPPLY FAN MOTOR INLET VANES RETURN AIR FAN OK RETURN FAN MOTOR OK OKA	A: OF A: OF	K: X K: X K: K: K: K: FAN HAS A AHU MIDWA K: X EPLACE FA EPLACE: K:	REPLACE: REPLACE: REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: FHERE IS AN ABAI ATING & COOLING SIZE: COMMEN	DPR-ACT DPR-ACT DPR-ACT DPR-ACT DPR-ACT NDONED GCOIL.	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: DPR-ACT: DPR-ACT = Dampe RP-ACT = Replace	
R.A. DAMPER E.A. DAMPER F. & B. DAMPER ZONE DAMPER COMMENTS: CO FILTER SECTION COMMENTS: SUPPLY AIR FAN SUPPLY FAN MOTOR INLET VANES RETURN FAN OK RETURN FAN MOTOR OK	A: OF A: OF A: OF A: OF A: OF D MOTOR, F OIL LEFT IN A A: OF	K: X K: K: K: FAN HAS A AHU MIDWA K: X EPLACE FA EPLACE: K:	REPLACE: REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	DPR-ACT DPR-ACT DPR-ACT DPR-ACT NDONED GCOIL.	OK: OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: RP- ACT: DPR-ACT: DPR-ACT = Dampe RP-ACT = Replace	
E.A. DAMPER F. & B. DAMPER V/A ZONE DAMPER COMMENTS: CO FILTER SECTION COMMENTS: SUPPLY AIR FAN SUPPLY FAN MOTOR INLET VANES RETURN AIR FAN OK RETURN FAN MOTOR OK	A: OF A: OF A: OF A: OF D MOTOR, F OIL LEFT IN A A: OF	K: K: FAN HAS A AHU MIDWA K: X EPLACE FA EPLACE: K:	REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE:	SIZE: SIZE: SIZE: SIZE: FHERE IS AN ABAI ATING & COOLING SIZE: COMMEN	DPR-ACT DPR-ACT DPR-ACT NDONED GCOIL.	OK: OK: OK:	RP- ACT: RP- ACT: RP- ACT: DPR-ACT = Dampe RP-ACT = Replace	
F. & B. DAMPER ZONE DAMPER N/A ZONE DAMPER N/A COMMENTS: CO FILTER SECTION N/A COMMENTS: SUPPLY AIR FAN SUPPLY FAN MOTOR N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	A: OF A: OF A: OF A: OF A: OF A: OF A: OF A: OF A: OF A: OF A: OF A: X	K: K: FAN HAS A AHU MIDWA K: X EPLACE FA EPLACE: K:	REPLACE: REPLACE: BAD BEARING. AY BETWEEN HE REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: COMMEN	DPR-ACT DPR-ACT NDONED G COIL. TS:	OK: OK:	RP- ACT: RP- ACT: DPR-ACT = Dampe RP-ACT = Replace	
ZONE DAMPER COMMENTS: CO FILTER SECTION COMMENTS: SUPPLY AIR FAN SUPPLY FAN MOTOR OK NIET VANES RETURN AIR FAN OK RETURN FAN MOTOR OK	A: OF D MOTOR, FOIL LEFT IN A A: OF COMMENT	K: FAN HAS A AHU MIDWA K: X FEPLACE FA EPLACE: K: I	REPLACE: BAD BEARING. AY BETWEEN HE. REPLACE: AN BEARINGS: X	SIZE: THERE IS AN ABAI ATING & COOLING SIZE: COMMEN	DPR-ACT NDONED GCOIL. TS:	ок:	RP-ACT: DPR-ACT = Dampe RP-ACT = Replace	
COMMENTS: CO FILTER SECTION COMMENTS: SUPPLY AIR FAN SUPPLY FAN MOTOR NIET VANES RETURN AIR FAN OK RETURN FAN MOTOR OK	D MOTOR, FOR DILLEFT IN A	FAN HAS A AHU MIDWA K: X EPLACE FA EPLACE: K:	BAD BEARING. AY BETWEEN HE REPLACE: AN BEARINGS: X	THERE IS AN ABAI ATING & COOLING SIZE:	NDONED G COIL. TS:		DPR-ACT = Dampe RP-ACT = Replace	
CO FILTER SECTION N/A COMMENTS: SUPPLY AIR FAN OK SUPPLY FAN MOTOR OK NLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	A: OF	K: X EPLACE FAEPLACE:	AY BETWEEN HE. REPLACE: AN BEARINGS: X	ATING & COOLING SIZE: COMMEN	G COIL.	FAN IS OL	RP-ACT = Replace	
FILTER SECTION N/A COMMENTS: SUPPLY AIR FAN OK SUPPLY FAN MOTOR OK NLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	: RE :: X RE	K: X EPLACE FA EPLACE: K:	REPLACE:	SIZE:	TS:	FAN IS OL		Actuator
COMMENTS: SUPPLY AIR FAN OK SUPPLY FAN MOTOR OK INLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	: RE	EPLACE FA	AN BEARINGS: X	COMMEN		FAN IS OL	_D	
COMMENTS: SUPPLY AIR FAN OK SUPPLY FAN MOTOR OK NLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	: RE	EPLACE FA	AN BEARINGS: X	COMMEN		FAN IS OL	_D	
SUPPLY AIR FAN OK SUPPLY FAN MOTOR OK INLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	X RE	EPLACE: K:				FAN IS OL	_D	
SUPPLY FAN MOTOR OK INLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	X RE	EPLACE: K:				FAN IS OL	_D	
NLET VANES N/A RETURN AIR FAN OK RETURN FAN MOTOR OK	A: X OF	K:	COMMENTS:	COMMEN	TS:			
RETURN AIR FAN OK RETURN FAN MOTOR OK			COMMENTS:					
RETURN FAN MOTOR OK	: RE	EDI A OF EA			***************************************			
		EPLACE FA	N BEARINGS:	COMMEN	TS:	N/A		
COMMENTS: AHI	RE	EPLACE:		COMMEN	TS:	*		
	U BADLY RL	USTED, BU	T OK					
NO	ISY							
COOLING COIL IN/A	· Tou	K: X	REPLACE:	SIZE:	CNTLVLV	OK: X	IDD ACT.	IDD DD
HEATING COIL N/A			REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
	A: X OK		REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
	N: X OH		REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
COMMENTS:	X O1	/\.	NET EACE.	JOIZE.	CIVILVE			_L
DOIVINIENTS.							RP-ACT = Replace	
							RP-BD = Replace B	ody
ALILL DUMP MOTOR		iz. I	DEDIAGE	loize	***************************************			
AHU PUMP MOTOR N/A AHU PUMP SEALS N/A			REPLACE: REPLACE:	SIZE: SIZE:				
COMMENTS:	. A Or	N:]1	REPLACE:	SIZE:				
COMMENTS:								*
PIPE INSULATION N/A	· IOk	K: X	MISSING:	[ESTIMATE	ED QUANTITY:			
DUCT INSULATION N/A			MISSING:		D QUANTITY:			
COMMENTS:	. ^	1. I	IVIIOOIIYO,	TEQ 1 INVA 1 E	LO QUANTITY:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG: **6620** FILE: 6620.XLS

	REFRIGE	RATION E	QUIPMEN	T - HVAC UPGRADE OB	SERVATIONS
CHILLER / EQUIP. NO.		CH-1	LOCATION (I	RM) MER BASEMENT	
REFG. EQUIP. TYPE:		R-ACCU		TSI MODEL:	SC2CNV30SP
C-WCT = Centrifugal w/ V	Nater Side C	ooling Tower		R-ACCU = Reciprocating w/ Air Cool	
R-WCT = Reciprocating v	w/ Water Side	Cooling Towe		ASB-WCT = Absorption w/ Water Sig	de Cooling Tower
ACCU = Air Cooled Cond				CT = Cooling Tower	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
COMP. MOTOR	N/A:	OK: X	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:	SIZE:	
COMMENTS:				SSORS REPLACED. ~2-4 YRS. OLI	D.
		ESSOR IS OR			
COOLING TOWER	N/A: X	OK:	REPLACE:	SIZE:	
AIR COOLED COND.	N/A: X	ОК:	REPLACE:	SIZE:	
COMMENTS:					
CHILLER INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTIT	
CHW PIPE INSUL.	N/A:	OK: X	MISSING:	ESTIMATED QUANTI	ГҮ:
				Tolar-	
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE: SIZE:	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		
	N/A: X	OK:	REPLACE:	SIZE: SIZE:	
CHW PUMP MOTOR	13	OIC	DEDLACE.		
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		
CHW PUMP SEALS CHW PUMP MOTOR	N/A: X N/A:	OK:	REPLACE:	SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: N/A:	OK: OK:	REPLACE:	SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS CHW PUMP MOTOR	N/A: X N/A: N/A: N/A:	OK: OK:	REPLACE: REPLACE:	SIZE: SIZE: SIZE:	
CHW PUMP SEALS CHW PUMP MOTOR CHW PUMP SEALS	N/A: X N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE:	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

BLDG:

6620

FILE:

6620.XLS

			BLDG:	662		FILE:	6620.XLS	
	REFRIGE	RATION	EQUIPME	NT - HVA	C UPGRADE	OBSERVAT	TIONS	
CHILLER / EQUIP. NO.		ACCU-1	LOCATION	(RM)	OUTSIDE			<u> </u>
REFG. EQUIP. TYPE:		ACCU	MFG.:	TSI	MC	DEL: TAC-17	74	
C-WCT = Centrifugal w/	Water Side C	ooling Tower		R-ACCU =	Reciprocating w/ A	ir Cooled Conden	sing Unit	
R-WCT = Reciprocating	w/ Water Side	Cooling Tow	er	ASB-WCT :	= Absorption w/ Wa	ater Side Cooling	Tower	
ACCU = Air Cooled Cond	densing Unit			CT = Coolir	ig Tower			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
COMP. MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK: X	REPLACE:		SIZE:			7
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:			
CT/ACCU FAN MTR	N/A:	OK:	REPLACE:		SIZE:			
COMMENTS:	TYPICAL	OF 12				***************************************		
0001/10 701/150	Thua	Toy.	JDED! 405		IOIZE			
COOLING TOWER	N/A:	OK:	REPLACE:		SIZE:			
AIR COOLED COND.	N/A:	ок: х	REPLACE:		SIZE:			
COMMENTS:								
CHILLER INSUL.	N/A: X	JOK:	MISSING:		ESTIMATED QU	IA NITITY.		
CHW PIPE INSUL.	N/A: X	OK:	MISSING:		ESTIMATED QU			
		JON.	INIOSING.		LOTIVIATED QU	MINITED.		
COMMENTS:								
CHW PUMP MOTOR	N/A: X	JOK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	OK:	REPLACE:		ISIZE:			*****
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
CHW PUMP MOTOR	N/A: X	IOK:	REPLACE:		SIZE:	, , , , , , , , , , , , , , , , , , ,	·····	
CHW PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:			
COMMENTS:		10111			10.22.			
COMMENTO.								
							· · · · · · · · · · · · · · · · · · ·	
<u> </u>							····	
					·			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

12 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

BLDG:

6620

FILE:

6620.XLS

SOILER VONCERTER NO. BLR-1 LOCATION (RM) MER SOILER TYPE: STM MFG: CLEAVER BROOKS MODEL: IS3.700.4520 SOILER TYPE: STMHW MFG: MODEL: MODEL: MODEL I STM - Steam STMHW - Steam to Hot Water Conv. MODEL: MODEL I STM - Steam STMHW - Steam to Hot Water Conv. MFG: MODEL: MODEL I STM - Steam STMHW - Steam to Hot Water Conv. MFHW/STM - High Temp HW to Steam Convertor DHW - Domestic Hot Water DHW - Domestic Hot Water		BOILE		/ERTER - HVAC		- OBSERV	ATIONO	
SOILER TYPE: STMHW MFG: MODEL: MODEL: MODEL: STM MODEL: MODEL: STM STM STREAM STMHW - Steam to Hot Water Conv. HTHW/HV-High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor HTHW/HV-High Temp. HW to HW CV. DHW - Domestic Hot Water Convertor DHW - Hot Water Convertor MTHW-HV-High Temp. HW to HW CV. DHW - Domestic Hot Water Convertor DHW - HOT Water DEIN GOOD CONDITION BUR PUMP MOTOR NA: OK: X REPLACE: SIZE: 3/4 HP SILR PUMP SEALS NA: OK: REPLACE: SIZE: S	OILER/CONVERTER NO		BLR-1			Thiops:	150 700 4500	
STIMPLE STIM					ER BROOKS			
HTHWINW - High Temp. HW to HW Cv. DHW - Domestic Hot Water Convertor Soller Burner ATMOSPHERIC: POWER: X OK: X REPLACE: SOLMENTS: TYPICAL OF (2) BOILERS BOILERS LOOK TO BE IN GOOD CONDITION BILL PUMP MOTOR NIA: OK: X REPLACE: SIZE: 3/4 HP SIZE PUMP SEALS NIA: OK: REPLACE: X SIZE: SIZE: SIZE: COMMENTS: REPLACE BOTH PUMPS, OLD & LEAKING, UNINSULATED. LABELED BOILER FEED PUMPS BILL INSULATION NIA: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION NIA: OK: X MISSING: ESTIMATED QUANTITY: BILL INSULATION NIA: OK: X MISSING: ESTIMATED QUANTITY: BILL INSULATION NIA: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR NIA: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR NIA: OK: REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR NIA: OK: REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR NIA: OK: REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR NIA: OK: REPLACE: SIZE: HW PUMP SEALS NIA: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: CV PUMP MOTOR NIA: X OK: MISSING: ESTIMATED QUANTITY:					UNTUNATION	MODEL:		
MY-HOVAGE MY-HOVAGE					HIHW/SI	M - High Tem	p HW to Steam Conventor	
SOILER BURNER FATMOSPHERIOL OF (2) BOILERS FORT								
BOILERS LOOK TO BE IN GOOD CONDITION SLR PUMP MOTOR N/A: OK: REPLACE: SIZE: 3/4 HP SIZE PUMP SEALS N/A: OK: REPLACE X SIZE: COMMENTS: REPLACE BOTH PUMPS, OLD & LEAKING, UNINSULATED. LABELED BOILER FEED PUMPS BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV INSULATION N/A: OK: REPLACE: SIZE: CV INSULATION N/A: OK: REPLACE: SIZE: CV INSULATION N/A: OK: REPLACE: SIZE: CV INSULATION N/A: OK: REPLACE: SIZE: CV INSULATION N/A: OK: REPLACE: SIZE: CV INSULATION N/A: OK: MISSING: ESTIMATED QUANTITY:					JUK:		INCI DAGE.	
BLR PUMP MOTOR N/A: OK: X REPLACE: SIZE: 3/4 HP BLR PUMP SEALS N/A: OK: REPLACE: X SIZE: COMMENTS: REPLACE BOTH PUMPS, OLD & LEAKING, UNINSULATED. LABELED BOILER FEED PUMPS BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: N/A: DK: X REPLACE: SIZE: N/A: DK: X REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: N/A: DK: REPLACE: SIZE: SIZE: N/A: DK: REPLACE: SIZE:	COMMENTS:							
SIR PUMP SEALS NA: OK: REPLACE: X SIZE: COMMENTS: REPLACE BOTH PUMPS, OLD & LEAKING, UNINSULATED. LABELED BOILER FEED PUMPS BIR INSULATION NA: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION NA: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR NA: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP SEALS NA: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP SEALS NA: OK: REPLACE: SIZE: HW PUMP MOTOR NA: OK: REPLACE: SIZE: HW PUMP MOTOR NA: OK: REPLACE: SIZE: HW PUMP MOTOR NA: OK: REPLACE: SIZE: HW PUMP SEALS NA: OK: REPLACE: SIZE: HW PUMP SEALS NA: OK: REPLACE: SIZE: HW PUMP SEALS NA: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR NA: OK: REPLACE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: CV PUMP MOTOR NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: COMMENTS: SIZE: CV PUMP MOTOR NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP MOTOR NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP MOTOR NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP MOTOR NA: OK: X MISSING: ESTIMATED QUANTITY:		BOILERS	LOOK TO BE	IN GOOD CONDITION				
SIR PUMP SEALS NA: OK: REPLACE: X SIZE: COMMENTS: REPLACE BOTH PUMPS, OLD & LEAKING, UNINSULATED. LABELED BOILER FEED PUMPS BIR INSULATION NA: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION NA: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR NA: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP SEALS NA: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP SEALS NA: OK: REPLACE: SIZE: HW PUMP MOTOR NA: OK: REPLACE: SIZE: HW PUMP MOTOR NA: OK: REPLACE: SIZE: HW PUMP MOTOR NA: OK: REPLACE: SIZE: HW PUMP SEALS NA: OK: REPLACE: SIZE: HW PUMP SEALS NA: OK: REPLACE: SIZE: HW PUMP SEALS NA: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR NA: OK: REPLACE: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: COMMENTS: SIZE: CV PUMP MOTOR NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: COMMENTS: SIZE: CV PUMP MOTOR NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP MOTOR NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP MOTOR NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP SEALS NA: OK: REPLACE: SIZE: CV PUMP MOTOR NA: OK: X MISSING: ESTIMATED QUANTITY:					. <u></u>			
SIR PUMP SEALS NA: OK: REPLACE: X SIZE: COMMENTS: REPLACE BOTH PUMPS, OLD & LEAKING, UNINSULATED. LABELED BOILER FEED PUMPS BIR INSULATION NIA: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION NIA: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS NIA: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP SEALS NIA: OK: REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR HW PUMP MOTOR NIA: OK: REPLACE: SIZE: HW PUMP MOTOR NIA: OK: REPLACE: SIZE: HW PUMP MOTOR NIA: OK: REPLACE: SIZE: HW PUMP MOTOR NIA: OK: REPLACE: SIZE: HW PUMP MOTOR NIA: OK: REPLACE: SIZE: HW PUMP MOTOR NIA: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR NIA: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS NIA: OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS NIA: OK: REPLACE: SIZE: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: OK: REPLACE: SIZE: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP MOTOR NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: CV PUMP SEALS NIA: X OK: REPLACE: SIZE: NIA: X OK: REPLACE: SIZE: NIA: X OK: REPLACE: SIZE: NIA: X OK: X OK: REPLACE: SIZE: NIA: X OK: X		Naura.	TOK: V	TREDI ACE:	SIZE	3/4 HP		
COMMENTS: REPLACE BOTH PUMPS, OLD & LEAKING, UNINSULATED. LABELED BOILER FEED PUMPS BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:		II				0,,,,,		
BLR INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:		DEDLACE	BOTH DI MAD			LABELED BOI	LER FEED PUMPS	
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X REPLACE: SIZE: 1/2 HP HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR N/A: OK: REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:	COMMENTS:	KEPLACE	BUTHFUNF	o, old a llatino, o		_ :		
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: PIPE INSULATION N/A: OK: X REPLACE: SIZE: 1/2 HP HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR N/A: OK: REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:								
PIPE INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY:	DI DINCHI ATION	1Ν/Δ·	TOK∙ X	IMISSING:	[ESTIMA]	TED QUANTIT	Y:	
COMMENTS: HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: OK: REPLACE: SIZE:				ESTIMAT	TED QUANTIT	Y:		
HW PUMP MOTOR N/A: OK: X REPLACE: SIZE: 1/2 HP HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE:		10111111						
HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:	COMMENTS.			· · · · · · · · · · · · · · · · · · ·				
HW PUMP MOTOR HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS:								
HW PUMP SEALS N/A: OK: X REPLACE: SIZE: NOT BOLTED DOWN HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS:		Ini/A	IOK: X	IREDI ACE:	ISIZE:	1/2 HP		
HW PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR HV PUMP MOTOR HV PUMP SEALS N/A: OK: REPLACE: SIZE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: SIZE: HW PUMP MOTOR HV PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: SIZE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:							TED DOWN	
HW PUMP SEALS N/A:								
HW PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: HW PUMP MOTOR N/A: OK: REPLACE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: SIZE: HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: CV PUMP SEALS N/A: N/A: OK: REPLACE: SIZE: SIZE: CV PUMP SEALS N/A: V/A: V/A: V/A: V/A: V/A: V/A: V/A: V								
HW PUMP SEALS					SIZE:			
HW PUMP MOTOR HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR CV PUMP SEALS N/A: CV PUMP								
HW PUMP SEALS N/A: OK: REPLACE: SIZE: COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:					SIZE:			
COMMENTS: THIS IS THE ONLY HOT WATER PUMP. SERVES PERIMETER RADIATION CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:					SIZE:			
CV PUMP MOTOR N/A: X OK: REPLACE: SIZE: SIZE		THIS IS T		T WATER PUMP. SEI	RVES PERIMET	ER RADIATIO	N	
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:	COMMENTS.	11110101	THE OTHER THO					
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:								
CV PUMP SEALS N/A: X OK: REPLACE: SIZE: COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:	CV DUMP MOTOR	N/Δ· X	IOK.	IREPLACÉ:	SIZE:			
COMMENTS: CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:					SIZE:			
CV INSULATION N/A: OK: X MISSING: ESTIMATED QUANTITY: CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:								
CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:	COMMENTS.							
CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:								
CV PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY:	CV INCLILATION	N/A·	IOK. X	IMISSING:	ESTIMA	TED QUANTI	TY:	
CV PIPE INSUL.								
	COMMENTS:		Jon. A					
	11							

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CT NO: DACA 01-94-D-0033

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

DATE: 10/11/94
PREPARED BY: AJN/CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7604

SUSPECT ACM: N

BLDG NAME: GEN INST BLDG

ELECTRIC METER: Y

GAS METER: Y

CONDITIONED SQFT:

13,493

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 61

011

MON: TUE: THUR: FRI: PRES START: 0 15 0 PRES STOP: 0 7 7 7 7 0 REQ START: 0

REMARKS:

BLDG. contact: Ms Foreman @ ext. 9475

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

EMC NO: 1406-001 **DATE**: 10/11/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

AIR HANDLING UNIT SURVEY OBSERVATIONS

AIITIAITE	ENTO CITIL CONTEL COO	LIVATIONO
BUILDING NUMBER: 760		
AHU NUMBER: AH	U-1 AHU LOCATION:	MER
REFRIG SYS # SRVNG AHU: C	H-1 SERVES AREA:	WEST HALF OF BLDG.
	% OF BLDG AREA HEATED:	45
AHU UNIT TYPE MULTI ZONE	NUM	MBER OF ZONES IF MZ UNIT: 5
CFM-HTG:	6,000 CFM-CLG:	6,000
MIN %OA:	15 MAX %OA:	100
NAMEPLATE		
UNIT MFG: TRAN	E UNIT	MODEL: MODULAR
SUPPLY FAN HP:	5 RET/EXH	
SUPPLY FAN MTR MFG:	RET/EXH FAN M	ITR MFG:
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTR	MODEL:
COMMENTS:		
COILS		
Coil	Coil Type Modulating V	alve?
PREHEAT COIL: NONE		
HEATING COIL: HOT	WATER 🗵	
REHEAT COIL: NONE		
HUMIDIFIER: NONE		
COOLING COIL: CW	\boxtimes	
SCHEDULE		
DAY SCHEDULE NO: 61		MONTH SCHEDULE NO: 3
SCHEDULE COMMENTS:		
PRES START: 0 7	, , , , , , , , , , , , , , , , , , ,	AT:
PRES START: 0 7 PRES STOP: 0 23	$\frac{7}{23}$ $\frac{7}{23}$ $\frac{7}{23}$ $\frac{7}{23}$ $\frac{7}{15}$	<u>0</u> 0
REQ START: 0 7	$\frac{25}{7}$ $\frac{25}{7}$ $\frac{25}{7}$ $\frac{15}{7}$	0
REQ STOP: 0 23	23 23 23 15	
MONTHS JAN: FEB: MAR: ON:		SEP: OCT: NOV: DEC:
CONTROLS		
TYPE OF CONTROLS:		STAT TYPE: OTHER
PRESENT TEMP WINTR OCC:	1 0	DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0	DECK DEG F: 0 O AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPOIN	
PRESENT TEMP SUM UNOCC:	0 OTHER SETPO	And the second s
MIN OA DMPR CONTROL:	MIXED AIR DMPR CONTROL:	IMPLEMENT DEMAND LIMIT CNTRLS?
MAX OA DMPR CONTROL:	ECONOMIZER DB CONTROL: Y	TIME CLOCK:
RET AIR DMPR CONTROL: Y	ECONOMIZER WB CONTROL: N	TIME CLOCK OPERATIONAL?
EXH AIR DMPR CONTROL: Y	TOTAL TIP CONTINUE.	Time Secon Of Erational?
OTHER CONTROLS DESCR:		
CONTROLS COMMENTS:		

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94 PREPARED BY: AJN/CWW

AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER: 760	04	
AHU NUMBER: AH	U-2 AHU LOCATION	: MER
REFRIG SYS # SRVNG AHU: C	H-1 SERVES AREA:	EAST HALF OF BLDG.
	% OF BLDG AREA HEATED:	45
AHU UNIT TYPE MULTI ZONE	NU	MBER OF ZONES IF MZ UNIT: 5
CFM-HTG:	6,000 CFM-CLG:	6,000
MIN %OA:	15 MAX %OA:	100
NAMEPLATE		
UNIT MFG:	LIMI	T MODEL:
SUPPLY FAN HP:		FAN HP: 0
SUPPLY FAN MTR MFG:	RET/EXH FAN I	
SUPPLY FAN MTR MODEL:	RET/EXH FAN MTI	
COMMENTS:		
COILS		
Coil	Coil Type Modulating \	/alve?
PREHEAT COIL: NONE		
HEATING COIL: HOT V	VATER 🖂	
REHEAT COIL: NONE		
HUMIDIFIER: NONE	:	
COOLING COIL: CW	⊠	
SCHEDULE		
DAY SCHEDULE NO: 61		MONTH COUEDING NO.
SCHEDULE COMMENTS:		MONTH SCHEDULE NO: 3
SUN: MON:		AT:
PRES START: 0 7 PRES STOP: 0 23	7 7 7	
	<u>23</u> <u>23</u> <u>23</u> <u>15</u>	0
REQ START: 0 7 REQ STOP: 0 23	$\frac{7}{23}$ $\frac{7}{23}$ $\frac{7}{23}$ $\frac{7}{15}$ $\frac{7}{15}$	0
REGIOF. 0 23	23 23 23 15	
MONTHS JAN: FEB: MAR:	APR: MAY: JUN: JUL: AUG:	SEP: OCT: NOV: DEC:
ON:		_ :
CONTROLS		
TYPE OF CONTROLS:	PNEUMATIC/ELECTRIC THERMO	STAT TYPE: OTHER
PRESENT TEMP WINTR OCC:	HOT	DECK DEG F: 0
		DECK DEG F: 0
PRESENT TEMP WINTR UNOCC:	0	CONDECT.
	MIXE	O AIR DEG F: 0
PRESENT TEMP WINTR UNOCC: PRESENT TEMP SUM UNOCC: PRESENT TEMP SUM UNOCC:	i U,	D AIR DEG F: 0
PRESENT TEMP SUM OCC:	0 OTHER SETPO	O AIR DEG F: 0 NT DESCRIP: 0 DINT DEG F: 0
PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC:	0 OTHER SETPOIR 0 OTHER SETPOIR 0 OTHER SETPOIR MIXED AIR DMPR CONTROL:	O AIR DEG F: 0 NT DESCRIP: 0 DINT DEG F: 0 IMPLEMENT DEMAND LIMIT CNTRLS? Y
PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: MAX OA DMPR CONTROL:	MIXED AIR DMPR CONTROL: Y ECONOMIZER DB CONTROL: Y	O AIR DEG F: 0 NT DESCRIP: 0 IMPLEMENT DEMAND LIMIT CNTRLS? Y TIME CLOCK: Y
PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL:	0 OTHER SETPOIR 0 OTHER SETPOIR 0 OTHER SETPOIR MIXED AIR DMPR CONTROL:	O AIR DEG F: 0 NT DESCRIP: 0 DINT DEG F: 0 IMPLEMENT DEMAND LIMIT CNTRLS? Y
PRESENT TEMP SUM OCC: PRESENT TEMP SUM UNOCC: MIN OA DMPR CONTROL: MAX OA DMPR CONTROL: PET AIR DMPR CONTROL:	MIXED AIR DMPR CONTROL: Y ECONOMIZER DB CONTROL: Y	O AIR DEG F: 0 NT DESCRIP: 0 IMPLEMENT DEMAND LIMIT CNTRLS? Y TIME CLOCK: Y

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/11/94
PREPARED BY: AJN/CWW

LOCATION: FT. RILEY, KS

ING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER		
		AHU LOCATION: MEZZANINE
AHU NUMBER	: AHU-3	
REFRIG SYS # SRVNG AF		SERVES AREA: SOUTH ADMIN OFFICES
	% OF	BLDG AREA HEATED: 10
AHU UNIT TYPE SINGL	E ZONE	NUMBER OF ZONES IF MZ UNIT: 0
CFM-HTG:	2,000	CFM-CLG : 2,000
MIN %OA:	15	MAX %OA: 100
NAMEPLATE		
UNIT MFG:	TRANE	UNIT MODEL: MCCA006MADOE
SUPPLY FAN HP:	2	RET/EXH FAN HP: 0
SUPPLY FAN MTR MFG:	Management of the control of the con	RET/EXH FAN MTR MFG:
SUPPLY FAN MTR MODEL:		RET/EXH FAN MTR MODEL:
COMMENTS:		
COILS		
Coil	Coil Type	Modulating Valve?
PREHEAT COIL:	NONE	
HEATING COIL:	HOT WATER	
REHEAT COIL:	NONE	
HUMIDIFIER: COOLING COIL:	NONE CW	
SCHEDULE		
DAY SCHEDULE NO:	61	MONTH SCHEDULE NO: 3
DAY SCHEDULE NO: SCHEDULE COMMENTS:	61	MONTH SCHEDULE NO: 3
=	MON: TUE: WED	
SCHEDULE COMMENTS:		: THUR: FRI: SAT:
SCHEDULE COMMENTS: SUN:	MON: TUE: WED. 7 7 7 23 23 23	: THUR: FRI: SAT: 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: 0	MON: TUE: WED 7 7 7 23 23 23 23 7 7 7	: THUR: FRI: SAT: 7 7 0 3 23 15 0 7 7 0
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 0	MON: TUE: WED. 7 7 7 23 23 23	: THUR: FRI: SAT: 7 7 0 8 23 15 0 7 7 0
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 0 REQ START: 0 REQ STOP: 0	MON: TUE: WED 7 7 7 23 23 23 7 7 7 23 23 23	: THUR: FRI: SAT: 7 7 0 3 23 15 0 7 7 0
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 0 REQ START: 0 REQ STOP: 0	MON: TUE: WED 7 7 7 23 23 23 7 7 7 23 23 23	THUR: FRI: SAT: 7 7 0 8 23 15 0 7 7 0 8 23 15 0
SCHEDULE COMMENTS: SUN: PRES START: 0 PRES STOP: 0 REQ START: 0 REQ STOP: 0 MONTHS JAN: FEB: ON:	MON: TUE: WED 7 7 7 23 23 23 7 7 7 23 23 23 MAR: APR: MAY:	: THUR: FRI: SAT: 7
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: O MONTHS JAN: FEB: ON:	MON: TUE: WED. 7 7 7 7 23 23 23 7 7 7 23 23 23 MAR: APR: MAY: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	THUR: FRI: SAT:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: O MONTHS JAN: FEB: ON: ON:	MON: TUE: WED 7 7 7 23 23 23 7 7 7 23 23 23 MAR: APR: MAY: □ □ □ □ □ □ □ □ □ □ □ □ □ □ ROLS: ELECTRIC	THUR: FRI: SAT:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: O MONTHS ON: X CONTROLS TYPE OF CONT	MON: TUE: WED. 7	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: O MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE U	MON: TUE: WED 7	THUR: FRI: SAT: 7
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: O MONTHS JAN: FEB: ON: ON: TYPE OF CONT PRESENT TEMP WINTE	MON: TUE: WED	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PREQ START: PREQ STOP: O MONTHS ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM	MON: TUE: WED 7 7 7 23 23 23 7 7 7 23 23 23 MAR: APR: MAY:	THUR: FRI: SAT:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: O MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM U PRESENT TEMP SUM U	MON: TUE: WED 7 7 7 23 23 23 27 7 23 23 23 MAR: APR: MAY:	THERMOSTAT TYPE: SINGLE SETPOINT HOT DECK DEG F: COLD DECK DEG F: COLD DECK DEG F: COLD THER SETPOINT DESCRIP: O OTHER SETPOINT DEG F:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: REQ STOP: O MONTHS JAN: FEB: ON: V CONTROLS TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE U PRESENT TEMP SUM U PRESENT TEMP SUM U MIN OA DMPR CONTROL	MON: TUE: WED 7	THUR: FRI: SAT:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: PREQ START: PREQ STOP: O MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL	MON: TUE: WED 7	THUR: FRI: SAT:
SCHEDULE COMMENTS: SUN: PRES START: PRES STOP: REQ START: O REQ STOP: O MONTHS JAN: FEB: ON: TYPE OF CONT PRESENT TEMP WINTE PRESENT TEMP WINTE PRESENT TEMP SUM U MIN OA DMPR CONTROL MAX OA DMPR CONTROL RET AIR DMPR CONTROL	MON: TUE: WED 7	THUR: FRI: SAT:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94
PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BOILER UNIT SOURCE OF BLDG HEAT	BUILDING NUMBER: 7604	BOILER RM LOCATION: MER
SOURCE OF BLIGHEAT BOILER TAG: BUR1 CONVERTER TAG: CONVERTER TAG: BOILER TYPE: HW (UP TO 250 DEG) CONVERTER TAG: CONVERTER TYPE: CONVER	BOILER UNIT	
SOURCE OF BLOG HEAT BOILER TAG: BUR1 CONVERTER TAG: BOILER TYPE: HY (UP TO 250 DEG) CONVERTER TAG: BOILER TYPE: NAT. GAS CONVERTER TYPE: CONVERTER TY		R SERVES AREA OR SERVICE: ALL
BOILER TAG: BLR-1 BOILER TYPE: HW (UP TO 250 DEG) FUEL TYPE: MAT. GAS CENTRAL PLANT DIRECT **CONVERTER TAG: CONVERTER TAG: CONVERTER TYPE: CONVENTER TYPE:		
BOILER TAGE: BURN HAW (UP TO 250 DEG) FUEL TYPE: NAT. GAS CENTRAL PLANT DIRECT NAMEPLATE **AREA HEATED BY BB RADIATION: 0 BOILER MFG: BURNHAM	● N BOILER	CONVERTER
FUEL TYPE: NAT. GAS		CONVERTER TAG:
CENTRAL PLANT DIRECT	BOILER TYPE: HW (UP TO 250 DEG)	CONVERTER TYPE:
NAMEPLATE	FUEL TYPE: NAT. GAS	CONV HT SOURCE:
NAMEPLATE		
BOILER MFG: BURNHAM BLR CAP OUTPUT (BTUH): 648,000	CENTRAL PLANT DIRECT	
UNIT MODEL: EW20GPF BLR CAP INPUT (BTUH): 877.000 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 61 MONTH SECHDULE NO: 1 SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 7 7 7 7 7 7 0 REQ START: 0 7 7 7 7 7 7 0 REQ STOP: 0 23 23 23 23 23 15 0 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: ON: OPERATING SETPOINT: O DEG F or PSIG TYPE OF BURNER CONTROLS: OPERATING SETPOINT: O DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS: CONTROLS: OPERATING SETPOINT: O DEG F or PSIG PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP MODEL: F108 HW PUMP PUMP TAG: 2 PUMP HP: 2 PUMP MFG: US ELECTRIC	NAMEPLATE	% AREA HEATED BY BB RADIATION:
UNIT MODEL: EWZOGPF BLR CAP INPUT (BTUH): 877,000 COMMENTS: SCHEDULE DAYS SCHEDULE NO: 61	BOILER MFG: BURNHAM	BLR CAP OUTPUT (BTUH): 648,000
DAYS SCHEDULE NO: 61		
DAYS SCHEDULE NO: 61	COMMENTS	
DAYS SCHEDULE NO: 61	COMMENTS.	
SCHEDULE COMMENTS: SUN: MON: TUE: WED: THUR: FRI: SAT:	SCHEDULE	
SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: 0 7 7 7 7 7 7 7 0	DAYS SCHEDULE NO: 61	MONTH SECHDULE NO: 1
SUN: MON: TUE: WED: THUR: FRI: SAT: PRES START: O 7 7 7 7 7 7 0	5/1/0 00/1/20	
PRES START: 0 7 7 7 7 7 0 PRES STOP: 0 23 23 23 23 15 0 REQ START: 0 7 7 7 7 7 7 0 REQ STOP: 0 23 23 23 23 15 0 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: DEC: ON: DEC: OT: NOV: DEC: DEC: NOV: DEC: OT: NOV: DEC: DEC: OT: NOV: DEC: NOV: DEC: NOV: DEC: NOV: DEC: NOV: NOV: DEC: NOV: NOV: DEC: NOV: DEC: NOV: NOV: NOV: NOV: NOV: NOV: NOV: NOV: DEC: NOV: NOV: NOV: NOV: DEC: NOV: NOV: NOV: NOV: NOV:		D. THID. EDI. CAT.
PRES STOP: 0 23 23 23 23 15 0 REQ START: 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 0 0 0 23 23 23 23 15 0 0 0 0 0 23 23 23 23 15 0		
REQ START: 0 7 7 7 7 7 0 REQ STOP: 0 23 23 23 23 15 0 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: ON: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		
REQ STOP: 0 23 23 23 23 15 0 MONTHS JAN: FEB: MAR: APR: MAY: JUN: JUL: AUG: SEP: OCT: NOV: DEC: CONTROLS TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y CONTROLS COMMENTS: HW PUMP PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP MODEL: F108 HW PUMP PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP MFG: US ELECTRIC PUMP MFG: US ELECTRIC		
CONTROLS TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BLR CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BLR CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BLR CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F OR SETPOINT: Y OPERATING SETPOINT: 0 DEG F OR SETPOINT: Y O		
CONTROLS TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BLR CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BLR CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BLR CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: Y OPERATING SETPOINT: 0 DEG F OR SETPOINT: Y OPERATING SETPOINT: 0 DEG F OR SETPOINT: Y O		
CONTROLS TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP TAG: 2 PUMP MFG: US ELECTRIC PUMP MODEL: F108	MONTHS JAN: FEB: MAR: APR: MAY:	JUN: JUL: AUG: SEP: OCT: NOV: DEC:
TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP TAG: 2 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP MODEL: F108		
TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP MODEL: F108 HW PUMP PUMP TAG: 2 PUMP MFG: US ELECTRIC PUMP MFG: US ELECTRIC PUMP MFG: US ELECTRIC PUMP MFG: US ELECTRIC		
TYPE OF BLR CONTROLS: PNEUMATIC RESET CONTROLS: Y OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP MODEL: F108 HW PUMP PUMP TAG: 2 PUMP MFG: US ELECTRIC PUMP MFG: US ELECTRIC PUMP MFG: US ELECTRIC PUMP MFG: US ELECTRIC	CONTROLS	
OPERATING SETPOINT: 0 DEG F or PSIG TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP TAG: 2 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP MODEL: F108		DESET CONTROL S. V
TYPE OF BURNER CONTROLS: CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP TAG: 2 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP MODEL: F108		
CONTROLS COMMENTS: HW PUMP PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP PUMP PUMP HODEL: F108 HW PUMP PUMP TAG: 2 PUMP HP: 2 PUMP MFG: US ELECTRIC		DEG F 01 F319
PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP PUMP PUMP PUMP PUMP PUMP PUM	TYPE OF BURNER CONTROLS.	
PUMP TAG: 1 PUMP HP: 2 PUMP MFG: US ELECTRIC PUMP SERVICE: HW PUMP PUMP PUMP PUMP PUMP PUMP PUMP PUM		
PUMP SERVICE: HW PUMP PUMP PUMP MODEL: F108 HW PUMP PUMP TAG: 2 PUMP HP: 2 PUMP MFG: US ELECTRIC	HW PUMP	
HW PUMP PUMP TAG: 2 PUMP HP: 2 PUMP MFG: US ELECTRIC	PUMP TAG: 1 PUMP HP:	
PUMP TAG: 2 PUMP HP: 2 PUMP MFG: US ELECTRIC	PUMP SERVICE: HW PUMP	PUMP MODEL: F108
	HW PUMP	
	DUMD TAGE 2 DUMD UD.	2 PUMP MFG: US FLECTRIC
	PUMP SERVICE: HW PUMP	PUMP MODEL: F108

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/11/94

PREPARED BY: AJN/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER: 760	BL	.DG NAME: GEN INST BL	DG	
REF. UNIT NUMBER/TAG	G: CH-1	LOCAT	ION (MER#):	MER
				AHU-1,2,3
UNI	IT TYPE RECIPROCATING	WITH AIR COOLED COND	ENSING UNIT	
NAMEPLATE				
CHILLER MFG:	TSI	TOWER	MFG: TRANE	
CHILLER MODEL:	SC2CD70	# OF TOWER F	ANS:	8.
CHILLER SERIAL NO:	9225-2	TOWER FA	AN V:	208
CHILLER V:	208	TOWER FAN A		4.1
CHILLER AMPS:		TOWER FA	N HP:	1
CHILLER PH:				
CHILLER CAP (TONS):	70			
COMMENTS:			-	
SCHEDULE				
DAYS SCHEDULE	E NO: 61	MONTHS SC	HEDULE NO:	2
SCHEDULE COMME	ENTS:			
SUN	N: MON: TUE: WI	ED: THUR: FRI:	SAT:	
PRES START:	0 7 7 ==	7 7 7	0	
PRES STOP:	0 23 23	23 23 15	0	
	$\frac{0}{0} = \frac{7}{23} = \frac{7}{23}$	$\frac{7}{23} = \frac{7}{23} = \frac{7}{15} =$	0	
REGIOTOT.	0 23 25	23 23 15	0	
MONTHS JAN: FEB	: MAR: APR: MAY:	JUN: JUL: AUG:	SEP: OCT:	NOV: DEC:
ON:				
CONTROLS				
TYPE OF CONT	ROLS: ELECTRIC	:		
CWS SET	POINT:	0 CNWS SET	POINT	<u> </u>
CWR SET		0 CNWR SET		0
PRESS L	ITE HI: N TEM	IP LITE HI: N OTH	ER INDICATIO	ne.
		LITE LOW: N	ER INDICATIO	
		GAUGES: N		
CONTROLS CO				
CW and CNW P	UMPS			
PUMP TAG: 1	PUMP HP:	2 PUMP	MEG: IISE	ECTRIC
PUMP SERVICE: CW PUN		PUMP M		ECTRIC
	(=:::::::::::::::::::::::::::::::::::::		~~L.	

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN

CHECKED BY:

AJN

			BLDG:	7604	2D0ED\/4	FILE:	7604.XLS	
			UNIT - HVAC	UPGRADE (DBSERVA	IONS		
HU NO.:	AHU-1	LOCATION	(Rm)		INOREL			
HU TYPE:	MZ (5) ZONE				MODEL:	AD Co. A Dina		
Z - Single Zone		ing & Vntltng.		Fan Coil (Indicate 2	2P for 2 Pipe or	4P for 4 Pipe)	
IZ - Mulitzone		able Air Vol.	The second secon	- Reheat System				
D - Dual Duct	UH - Unit F			Induction System		7/2./	Inn vot	
).A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	ОК:	RP- ACT:	
COMMENTS:							DPR-ACT = Damper	
							RP-ACT = Replace	Actuator
FILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	IDED! ACE	FAN BEARINGS:	COMMEN	NTS:			
		REPLACE		COMMEN				
SUPPLY FAN MOTOR	OK: X		COMMENTS:	Toomin	····			
NLET VANES	N/A: X	OK:		ICOMMEN	ITC:	N/A		
RETURN AIR FAN	OK:		FAN BEARINGS:	ICOMME!		N/A		
RETURN FAN MOTOR	OK:	REPLACE		COMME	VI O.	13/71		
COMMENTS:								
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
HEATING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	ок: х	RP- ACT:	RP-BD:
PREHEAT COIL	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD
							RP-ACT = Replace	Actuator
REHEAT COIL								
							RP-BD = Replace	Body
REHEAT COIL							RP-BD = Replace	Воду
REHEAT COIL COMMENTS:		Tok	IDEDLACE:	ICI7E:			RP-BD = Replace	воду
REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			RP-BD = Replace	Воду
REHEAT COIL COMMENTS: AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:			RP-BD = Replace	Волу
REHEAT COIL COMMENTS:							RP-BD = Replace	Вооту
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:			RP-BD = Replace	Вооу
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: X		REPLACE: MISSING:	SIZE:	TED QUANTITY		RP-BD = Replace	Воду
REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: X N/A: X	OK:	REPLACE:	SIZE:	TED QUANTITY		RP-BD = Replace	воду

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

AHU TYPE: 6Z - Single Zone MZ - Mulitzone DD - Dual Duct D.A. DAMPER E.A. DAMPER E.A. DAMPER E.A. DAMPER E.A. DAMPER E.ONE DAMPER E.OMMENTS:	AHU-2 MZ H&V - Hea	LOCATION MFG.: ating & Vntltng iable Air Vol.	TRANE CLIMATE FC - RHT	ZZANINE	MODEL: 2P for 2 Pipe or	4P for 4 Pi	ipe) RP- ACT: RP- ACT:	
AHU TYPE: SZ - Single Zone MZ - Mulitzone DD - Dual Duct O.A. DAMPER R.A. DAMPER E.A. DAMPER E.A. DAMPER E.A. DAMPER COMMENTS:	AHU-2 MZ H&V - Hea VAV - Var UH - Unit N/A: N/A: N/A: X	LOCATION MFG.: ating & Vntltng iable Air Vol. Heater OK: X OK: X OK: OK:	TRANE CLIMATE TRANE CLIMATE FC- RHT IND REPLACE: REPLACE: REPLACE: REPLACE:	ZZANINE E CHANGER - Fan Coil (Indicate T - Reheat System - Induction System SIZE: SIZE: SIZE:	MODEL: 2P for 2 Pipe or DPR-ACT DPR-ACT	4P for 4 Pi	RP- ACT:	
AHU TYPE: SZ - Single Zone MZ - Mulitzone DD - Dual Duct O.A. DAMPER R.A. DAMPER E.A. DAMPER E.A. DAMPER E.A. DAMPER COMMENTS:	MZ H&V - Hea VAV - Var UH - Unit N/A: N/A: N/A: X	MFG.: ating & Vntltng iable Air Vol. Heater OK: X OK: X OK: OK:	TRANE CLIMATE FC - RHT IND REPLACE: R	E CHANGER - Fan Coil (Indicate - Reheat System - Induction System SIZE: SIZE: SIZE:	2P for 2 Pipe or DPR-ACT DPR-ACT	OK:	RP- ACT:	
SZ - Single Zone MZ - Mulitzone DD - Dual Duct O.A. DAMPER R.A. DAMPER E.A. DAMPER F. & B. DAMPER ZONE DAMPER COMMENTS:	H&V - Hea VAV - Var UH - Unit N/A: N/A: N/A: X N/A: X	ating & Vntltng iable Air Vol. Heater OK: X OK: X OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	- Fan Coil (Indicate Γ - Reheat System - Induction System SIZE: SIZE: SIZE:	2P for 2 Pipe or DPR-ACT DPR-ACT	OK:	RP- ACT:	
MZ - Mulitzone DD - Dual Duct O.A. DAMPER R.A. DAMPER E.A. DAMPER F. & B. DAMPER ZONE DAMPER COMMENTS:	VAV - Var UH - Unit N/A: N/A: N/A: X N/A: X	iable Air Vol. Heater OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	- Reheat System - Induction System SIZE: SIZE: SIZE:	DPR-ACT DPR-ACT	OK:	RP- ACT:	
DD - Dual Duct O.A. DAMPER R.A. DAMPER E.A. DAMPER F. & B. DAMPER ZONE DAMPER COMMENTS: FILTER SECTION	N/A: N/A: N/A: N/A: X N/A: X	Heater OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	- Induction System SIZE: SIZE: SIZE:	DPR-ACT DPR-ACT	ок:		
O.A. DAMPER R.A. DAMPER E.A. DAMPER F. & B. DAMPER ZONE DAMPER COMMENTS:	N/A: N/A: N/A: X N/A: X	OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	DPR-ACT DPR-ACT	ок:		
R.A. DAMPER E.A. DAMPER F. & B. DAMPER ZONE DAMPER COMMENTS:	N/A: N/A: X N/A: X	OK: X OK: OK:	REPLACE: REPLACE:	SIZE: SIZE:	DPR-ACT	ок:		
E.A. DAMPER F. & B. DAMPER ZONE DAMPER COMMENTS:	N/A: X N/A: X	OK:	REPLACE:	SIZE:			PD ACT	
F. & B. DAMPER ZONE DAMPER COMMENTS: FILTER SECTION	N/A: X	OK:	REPLACE:		DPR-ACT			
ZONE DAMPER COMMENTS: FILTER SECTION		1		SIZE:		OK:	RP- ACT:	
COMMENTS: FILTER SECTION	N/A:	JOK: X	REPLACE:		DPR-ACT	OK:	RP- ACT:	
FILTER SECTION				SIZE:	DPR-ACT	OK:	RP- ACT:	
							DPR-ACT = Damp	er Actuator
							RP-ACT = Replace	a Actuator
	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTO:	IN/A.	TOV' V	INCPLACE:	SIZE:				
SUPPLY AIR FAN	OK: X	IREPLACE	FAN BEARINGS:	COMMEN	ITQ.		· · · · · · · · · · · · · · · · · · ·	
	OK: X	REPLACE		COMMEN				
	N/A: X	OK:	COMMENTS:	ICOMMEN	110.			
	OK:		FAN BEARINGS:	Iconner	ITC.	A1/A		
				COMMEN		N/A		
	OK:	REPLACE		COMMEN	HS:	N/A		
COMMENTS:								
								
COOLING COIL	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
	N/A:	OK: X	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
	N/A: X	OK:	REPLACE:	SIZE:	CNTLVLV	OK:	RP- ACT:	RP-BD:
		TER IN MEZZ					RP-ACT = Replace	
			311111				RP-BD = Replace B	
	-						rv-su = replace 8	y
AHU PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:				
	N/A: X	OK:	REPLACE:	SIZE:				
COMMENTS:			1	1 * 1 * 1				
JOHN TO THE PARTY OF THE PARTY								
PIPE INSULATION	N/A:	OK: X	MISSING:	JESTIMAT	ED QUANTITY:			
·····	N/A:	OK: X	MISSING:		D QUANTITY:			
COMMENTS:		1-:	1	1-01111/11				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY: CHECKED BY: AJN AJN

BLDG:

7604

FILE: 7604.XLS

	AIK F	IANDLIN	G UNIT - HVAC U	PURADE	ODOLIVA	10110		
HU NO.:	AHU-3	LOCATION						
HU TYPE:	SZ	MFG.:	TRANE CLIMATE CH	HANGER	MODEL:			
Z - Single Zone	H&V - Hea	ting & Vntltng			2P for 2 Pipe or	4P for 4 Pip	e)	
IZ - Mulitzone	VAV - Vari	able Air Vol.		Reheat System				
D - Dual Duct	UH - Unit F	leater	IND - In	duction System				
).A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
R.A. DAMPER	N/A:	OK: X	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
.A. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
. & B. DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ONE DAMPER	N/A: X	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
COMMENTS:	SYSTEM	NEW					DPR-ACT = Dampe	r Actuator
							RP-ACT = Replace	Actuator
				10.55				
ILTER SECTION	N/A:	OK: X	REPLACE:	SIZE:				
COMMENTS:								
SUPPLY AIR FAN	OK: X	REPLACE	FAN BEARINGS:	COMMEN				
SUPPLY FAN MOTOR	OK: X	REPLACE		COMMEN	NTS:			
	N/A: X	OK:	COMMENTS:					
NI FT VANES								
			FAN BEARINGS:	COMMEN	NTS:	N/A		
NLET VANES RETURN AIR FAN	OK:	REPLACE	FAN BEARINGS:	COMMEN		N/A		·
RETURN AIR FAN RETURN FAN MOTOR						N/A		
RETURN AIR FAN	OK:	REPLACE				N/A		
RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE		COMMEN	NTS:			
RETURN AIR FAN RETURN FAN MOTOR	OK:	REPLACE REPLACE	REPLACE:	COMMEN	CNTLVLV	ОК: Х	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL	OK:	REPLACE	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL	OK: OK:	REPLACE REPLACE	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS:	OK: OK: N/A: N/A:	REPLACE REPLACE OK: X OK: X	REPLACE:	SIZE:	CNTLVLV	OK: X	RP- ACT:	RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL	OK: OK: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL	OK: OK: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS: AHU PUMP MOTOR AHU PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A:	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:
RETURN AIR FAN RETURN FAN MOTOR COMMENTS: COOLING COIL HEATING COIL PREHEAT COIL REHEAT COIL COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: X	REPLACE REPLACE OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:	SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	CNTLVLV CNTLVLV CNTLVLV CNTLVLV	OK: X OK: X OK: OK:	RP- ACT: RP- ACT: RP- ACT:	RP-BD: RP-BD: RP-BD:

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE: PREPARED BY: 11 Nov-94

CHECKED BY:

AJN

BLDG:

7604

FILE:

7604.XLS

CHILLER / EQUIP. NO. CH-1 LOCATION (RM) MER REFG EQUIP. TYPE: R-ACCU MFG: TRANE (ACCU) MFG: TRANE (ACCU) MFG: TRANE (ACCU) MFG: TRANE (ACCU) REdiprocating W/ Air Cooled Condensing Unit R-ACCU = Rediprocating W/ Air Cooled Condensing Unit R-ACCU = Air Cooled Condensing Unit R-ACCU = Air Cooled Condensing Unit COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: X REPLACE: SIZE: REFG. EQUIP. TYPE: C-WCT = Centrifugal w/ Water R-WCT = Reciprocating w/ Wa ACCU = Air Cooled Condensir COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A	R-ACCU Side Cooling Tower ster Side Cooling Tower g Unit OK: X OK: X	MFG.: TRAN r R-ACC wer ASB-\ CT =	IE (ACCU) CU = Reciprocation WCT = Absorption Cooling Tower SIZE:	ng w/ Air Coole n w/ Water Side	d Condensing Unit e Cooling Tower		
C-WCT = Centrifugal w/ Water Side Cooling Tower R-WCT = Reciprocating w/ Water Side Cooling Tower ACCU = Air Cooled Condensing Unit ACCU = Air Cooled Condensing Unit ACCU = Air Cooled Condensing Unit CT = Cooling Tower ACCU = Air Cooled Condensing Unit CT = Cooling Tower CT = Cooling Tower CT = Cooling Tower CHILLER IS TSI SC2CD70 COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: REPLACE: SIZE: CTIACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: X OK: REPLACE: SIZE: COOLING TOWER N/A: OK: X REPLACE: SIZE: COOLING TOWER N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X REPLACE: SIZE: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPPE INSUL. N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REP	C-WCT = Centrifugal w/ Water R-WCT = Reciprocating w/ Wa ACCU = Air Cooled Condensir COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A	Side Cooling Tower ter Side Cooling Tore g Unit OK: X OK: X	R-ACG wer ASB-1 CT =	CU = Reciprocation WCT = Absorption Cooling Tower SIZE:	ng w/ Air Coole n w/ Water Side	d Condensing Unit e Cooling Tower	
ASB-WCT = Absorption w/ Water Side Cooling Tower	R-WCT = Reciprocating w/ Wa ACCU = Air Cooled Condensir COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A	ter Side Cooling Too g Unit : OK: X : OK: X	wer ASB-1 CT =	WCT = Absorption Cooling Tower SIZE:	n w/ Water Side	Cooling Tower	
ACCU = Air Cooled Condensing Unit CT = Cooling Tower	ACCU = Air Cooled Condensir COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A	g Unit .: OK: X .: OK: X	REPLACE:	Cooling Tower SIZE:			
COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: TYPICAL OF 8 SIZE: SIZE: COOLING TOWER N/A: X OK: REPLACE: SIZE: COMMENTS: SIZE: SIZE: SIZE: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: <td< td=""><td>COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A</td><td>: OK: X</td><td>REPLACE:</td><td>SIZE:</td><td>CHILLER I</td><td>S TSI SC2CD70</td><td></td></td<>	COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A	: OK: X	REPLACE:	SIZE:	CHILLER I	S TSI SC2CD70	
COMP. MOTOR N/A: OK: X REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: TYPICAL OF 8 SIZE: COOLING TOWER N/A: OK: X REPLACE: SIZE: COMMENTS: N/A: OK: X REPLACE: SIZE: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A:	COMP. MOTOR N/A COMP. MOTOR N/A COMP. MOTOR N/A	: OK: X					
COMP. MOTOR N/A: OK: REPLACE: SIZE: COMP. MOTOR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: X REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: TYPICAL OF 8 SIZE: COOLING TOWER N/A: X OK: REPLACE: SIZE: COOLING TOWER N/A: OK: X REPLACE: SIZE: COMMENTS: SIZE: SIZE: COMMENTS: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: S	COMP. MOTOR N/A		REPLACE:	0:25			
COMP. MOTOR	COMP. MOTOR N/A	: OK:					
CT/ACCU FAN MTR CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: TYPICAL OF 8 COOLING TOWER N/A: V OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:		li i					
CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: TYPICAL OF 8 COOLING TOWER N/A: OK: REPLACE: SIZE: COMMENTS: COOLING TOWER N/A: OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	CT/ACCILEAN MTR N/A						
CT/ACCU FAN MTR N/A: OK: REPLACE: SIZE: COMMENTS: TYPICAL OF 8 COOLING TOWER N/A: AIR COOLED COND. N/A: OK: REPLACE: SIZE: SIZE: AIR COOLED COND. N/A: OK: REPLACE: SIZE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: N/A: OK: MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: l It							
COMMENTS: TYPICAL OF 8 COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	11		i				
COOLING TOWER N/A: X OK: REPLACE: SIZE: AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A:	CT/ACCU FAN MTR N/A	: OK:	REPLACE:	SIZE:			
AIR COOLED COND. N/A: OK: X REPLACE: SIZE: COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	COMMENTS: TY	PICAL OF 8					
AIR COOLED COND. N/A: OK: X REPLACE: SIZE: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: SI	COOLING TOWER IN/A	: X OK:	REPLACE:	ISIZE:			
COMMENTS: CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:							
CHILLER INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: COMMENTS: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE:			THE DIOC.			#*	
CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	OOMINERTO.						
CHW PIPE INSUL. N/A: OK: X MISSING: ESTIMATED QUANTITY: CHW PUMP MOTOR N/A: OK: X REPLACE: SIZE: CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	CHILLER INSUL. IN/A	: IOK: X	IMISSING:	IESTIMAT	FD QUANTITY	7.	
CHW PUMP MOTOR							
CHW PUMP SEALS N/A: OK: X REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	CHW PUMP MOTOR IN/A	· IOK· X	IREPLACE:	ISIZE:			
CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:							
CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:							
CHW PUMP MOTOR N/A: OK: REPLACE: SIZE: CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	ll l			I			
CHW PUMP SEALS N/A: OK: REPLACE: SIZE: CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:	CHW PUMP MOTOR IN/A	: OK:	L				
CHW PUMP MOTOR N/A: OK: REPLACE: SIZE:			1	l l	****		
	II		REPLACE:	SIZE:			
COMMENTS:			1				

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

11 Nov-94

PREPARED BY:

AJN AJN

CHECKED BY:

,

				700			Fu F	7004100	
			BLDG:	7604			FILE:	7604.XLS	
		R & CON	IVERTER -	HVAC U	GRADI	E OBSER\	/ATIONS		
BOILER/CONVERTER NO.		BLR-1	LOCATION	· /	MER				
BOILER TYPE:		HW	MFG.:	BURNHAM		MODEL:	EW-20-G-PI		
CONVERTER TYPE:			MFG.:			MODEL:			
STM - Steam	1		t Water Conv.				p HW to Steam	Convertor	
HW - Hot Water			p. HW to HW C		·	omestic Hot Wa			
BOILER BURNER	ATMOSPI	HERIC:	POWER:	Х	OK:	Χ	REPLACE:		
COMMENTS:									
	JEWA V	167	Inchiance		Toize				
BLR PUMP MOTOR	Ñ/A: X	OK:	REPLACE:		SIZE:				
BLR PUMP SEALS	N/A: X	OK:	REPLACE:		SIZE:				····
COMMENTS:									
BLR INSULATION	N/A:	OK: X	MISSING:		ESTIMAT	ED QUANTITY	γ:		
PIPE INSULATION	N/A:	OK: X	MISSING:		TESTIMAT	ED QUANTITY	Y :		
COMMENTS:									
001111112111101				····					
HW PUMP MOTOR	N/A:	OK: X	REPLACE:		SIZE:				
HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK: X	REPLACE:		SIZE: SIZE:				
	41								
HW PUMP SEALS	N/A:	OK: X	REPLACE:		SIZE:				
HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A:	OK: X	REPLACE:		SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A:	OK: X OK: X	REPLACE: REPLACE:		SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: X	REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR	N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS	N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:				
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	ED QUANTITY	Y:		
HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS HW PUMP MOTOR HW PUMP SEALS COMMENTS: CV PUMP MOTOR CV PUMP SEALS COMMENTS:	N/A: N/A: N/A: N/A: N/A: N/A: N/A: N/A:	OK: X OK: X OK: X OK: OK: OK: OK: OK:	REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE: REPLACE:		SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE: SIZE:	ED QUANTITY			

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

EMC NO: 1406-001

CLIENT CONTRACT NO: DACA 01-94-D-0033

DATE: 10/12/94

LOCATION: FT. RILEY, KS

PREPARED BY: AJN/CWW

BUILDING DATA SURVEY OBSERVATIONS

BLDG NUMBER: 7656 BLDG NAME: GEN INST BLDG

ELECTRIC METER: Y CONDITIONED SQFT:

13,493

GAS METER: Y
SUSPECT ACM: N

BUILDING OCCUPANCY SCHEDULE

BUILDING SCHDULE NO: 61

THUR: FRI: TUE: WED: SUN: MON: 7 7 7 0 PRES START: 15 0 23 23 0 23 23 PRES STOP: 7 0 7 7 REQ START: 0 7. 15 REQ STOP: 23 23

REMARKS:

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94
PREPARED BY: AJN/CWW

AIR HANDLING UNIT SURVEY OBSERVATIONS

BUILDING NUMBER: 76 AHU NUMBER: AH	56 IU-1				
			MEZZANINE		
NEI NIO 575 # SKYNG AND:		SERVES AREA: W AREA HEATED:	EST HALF OF	BLDG.	
AHU UNIT TYPE MULTI ZONE					 1
AHU UNIT TYPE MULTI ZONE		NUMB	ER OF ZONE	S IF MZ UNIT:	<u>6</u>
CFM-HTG:	7,000	CFM-CLG:	7	,000	_
MIN %OA:	15	MAX %OA:		100	
NAMEPLATE					
UNIT MFG:		UNIT M	ODEL:		
SUPPLY FAN HP:	5	RET/EXH FA	AN HP:	0	
SUPPLY FAN MTR MFG: SUPPLY FAN MTR MODEL:		RET/EXH FAN MTF			
COMMENTS:	RI	ET/EXH FAN MTR M	ODEL:	77 AM	
COILS					
Coil	Coil Type	Modulating Valv	e?		
PREHEAT COIL: NONE					
HEATING COIL: HW					
REHEAT COIL: NONE HUMIDIFIER: NONE		_			
COOLING COIL: CW		- 🛱			
SCHEDULE					
DAY SCHEDULE NO: 61		BAC .	ONTH SCUED		
		MC	ONTH SCHED	ULE NO: 3	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON:	TUE: WED: THUR	•	DNTH SCHED	ULE NO: 3	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: PRES START: 0 7	7 7	: FRI: SAT:		ULE NO: 3	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON:	7 7 7 23 23 23 23	: FRI: SAT: 7 7 0 3 15 0		ULE NO: 3	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: PRES START: 0 7 PRES STOP: 0 23	7 7	: FRI: SAT: 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ULE NO: 3	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: 7 PRES START: 0 7 7 PRES STOP: 0 23 7 REQ START: 0 7 7 REQ STOP: 0 23	7 7 23 23 23 23 23 23 23 23 23 23	: FRI: SAT: 7 0 0 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ULE NO: 3	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON:	7 23 23 23 7 7 7 23 23 23 23 23 23 23 23 23	: FRI: SAT: 7 7 0 3 15 0 7 7 0 3 15 0): OCT: 1	ULE NO: 3	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: 7 PRES START: 0 7 7 PRES STOP: 0 23 7 REQ START: 0 7 7 REQ STOP: 0 23 23 MONTHS JAN: FEB: MAR: ON:	7 7 23 23 23 23 23 23 23 23 23 23	: FRI: SAT: 7 0 0 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0): OCT: 1		
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON: CONTROLS	7 23 23 23 23 23 23 23 23 23 23 23 23 23	: FRI: SAT: 7 7 0 3 15 0 7 7 0 3 15 0 10L: AUG: SEF): OCT: 1	NOV: DEC:	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON:	7 23 23 23 23 23 23 23 23 23 23 23 23 23	: FRI: SAT: 7 7 0 3 15 0 7 7 0 8 15 0 HUL: AUG: SEP	COCT: N	NOV: DEC:	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON: CONTROLS	7 23 23 23 23 23 23 23 23 23 23 23 23 23	: FRI: SAT: 7 7 0 3 15 0 7 7 0 3 15 0 10L: AUG: SEP X X X THERMOSTA HOT DECK COLD DECK	COCT: N TYPE: SIN COEGF: COEGF:	NOV: DEC:	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON:	7 7 23 23 23 23 23 23 23 23 23 23 23 23 23	### FRI: SAT: 7	COCT: N TYPE: SII COEG F: COEG F: COEG F:	NOV: DEC: ☑ ☑ NGLE SETPOINT 0	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON:	7 7 23 23 23 23 23 23 23 23 23 23 23 23 23	: FRI: SAT: 7 7 0 3 15 0 7 7 0 3 15 0 10L: AUG: SEP X X X THERMOSTA HOT DECK COLD DECK	COCT: N TYPE: SIF COEG F: COEG F: COEG F: COEG F: COEG F: COEG F: COEG F: COEG F:	NOV: DEC: X NGLE SETPOINT 0 0 0	
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: 7 PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON:	7 7 23 23 7 7 23 23 APR: MAY: JUN: J ☑ ☑ ELECTRIC 0 0 0 0 0 0	THERMOSTA HOT DECK COLD DECK MIXED AIF OTHER SETPOINT D OTHER SETPOINT	OCT: N AT TYPE: SII ADEG F: C DEG F: ESCRIP: DEG F:	NOV: DEC: NGLE SETPOINT 0 0 0	e2 [V]
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: 7 PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON:	7 7 23 23 23 23 23 23 23 23 23 23 23 23 23	THERMOSTA HOT DECK COLD DECK MIXED AIR OTHER SETPOINT D OTHER SETPOINT NTROL: N IMP	OCT: N AT TYPE: SII ADEG F: C DEG F: ESCRIP: DEG F:	NOV: DEC:	===
DAY SCHEDULE NO: 61 SCHEDULE COMMENTS: SUN: MON: 7 PRES START: 0 7 PRES STOP: 0 23 REQ START: 0 7 REQ STOP: 0 23 MONTHS JAN: FEB: MAR: ON:	7 7 23 23 23 23 23 23	THERMOSTA HOT DECK COLD DECK MIXED AIF OTHER SETPOINT D OTHER SETPOINT D OTHER SETPOINT D OTHER SETPOINT D OTHER SETPOINT D OTHER SETPOINT D OTHER SETPOINT D OTHER SETPOINT D OTHER SETPOINT D OTHER SETPOINT D	OCT: N AT TYPE: SII K DEG F: K DEG F: ESCRIP: DEG F: LEMENT DEM	NOV: DEC: NGLE SETPOINT 0 0 0	к: 🕎

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94 PREPARED BY: AJN/CWW

AIR HANDLING UNIT SURVEY OBSERVATIONS

	7 44. 4 7 1.											
	BUILDING NUMBER	t: 7656										
	AHU NUMBER	R: AHU	-2			AHU L	OCATIO	N: MEZ	ZANINE	MER		
	REFRIG SYS # SRVNG AI	HU: CH	-1			SERVES	S AREA:	EAST	HALF OF	BLDG.		
		-		% O	F BLDG	AREA H	EATED:				50	
	AHU UNIT TYPE MULT	ZONE					N	UMBER (DE ZONE	S IF MZ	UNIT	6
	AND ONLY THE INICE!	ZONL						O I I D L I C				
	CFM-HTG:		7	,000		CF	M-CLG:			7,000		
	MIN %OA:			15		MA	X %OA:			100		
١	IAMEPLATE											
	UNIT MFG:	MCQU	AY			:	UN	IIT MODE	L: LM	L114EH	:	
	SUPPLY FAN HP:			5			RET/EX	(H FAN H	P:		0	
	SUPPLY FAN MTR MFG:	MAGNI	ETEK			RET/E	XH FAN	MTR MF	G:			
	SUPPLY FAN MTR MODEL:	6-3556	253-02		1	RET/EXH	FAN M	TR MODE	L:			
	COMMENTS:											
C	OILS											
	Coil	· (Coil Type	•		Мо	dulating	Valve?				
	PREHEAT COIL:	NONE										
	HEATING COIL:	HOT W	ATER			\boxtimes						
	REHEAT COIL:	NONE										
	HUMIDIFIER:	NONE										
	COOLING COIL:	CW										
S	CHEDULE											
	DAY SCHEDULE NO:	61						MONT	'H SCHE	DULE N	0:	3
	SCHEDULE COMMENTS:											<u>-</u>
								0.4.7				
	SUN:	MON:	TUE:	WEI			FRI:	SAT:				
	PRES START: 0	7	= 7		7	7 =		0				
	PRES STOP: 0 REQ START: 0	<u>23</u>	== <u>23</u> 7		23 7	7	15 7	0				
	REQ STOP: 0	23	23		23	23	15	0				
	REQUIOF											
1		MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	_
	ON:	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	\boxtimes	
C	CONTROLS											_
	TYPE OF CONT	ROLS:	PNEUM	ATIC				MOSTAT		SINGLE	SETPOINT	
	PRESENT TEMP WINTE	R OCC:			0			T DECK E			70	
	PRESENT TEMP WINTR U	NOCC:			0			D DECK [60 69	
	PRESENT TEMP SUI	A OCC:	Г		0	OTHE	R SETP	OINT DES	CRIP:		***	
	PRESENT TEMP SUM U				0	OTI	HER SET	POINT D	EG F:		0	
	MIN OA DMPR CONTROL	.: T	MIX	ED AIR	DMPR	CONTRO	L: N	MPLE	MENT C	EMAND	LIMIT CNT	RLS? N
	MAX OA DMPR CONTROL					CONTRO		1			TIME CLO	
	RET AIR DMPR CONTROL	" =				CONTRO		1	TIME	CLOCK	OPERATION	=
	EXH AIR DMPR CONTROL	==					-	-				
	OTHER CONTROLS											
	CONTROLS COM	ı⊨N ſS:										

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001 DATE: 10/12/94

PREPARED BY: AJN/CWW

BOILER AND CONVERTER SURVEY OBSERVATIONS

BUILDING NUMBER	: <u>7656</u>				BOILER	RM LOC	ATION:	MER		
BOILER UNIT										
SOURCE OF BLDG	HEAT	BLR/CO	NVERTER :	SERVES AF	REA OR S	ERVICE:	ALL			
● ⊠ BOILER					ONVERT	ER				-
BOILER TAG				co	NVERTER	R TAG:				
BOILER TYPE		250 DEG)		i	VERTER					
FUEL TYPE	: NAT. GAS			CON	IV HT SO	URCE:				
CENTRAL PLAN	T DIRECT									
NAMEPLATE				% AREA HI	EATED B	Y BB RAI	DIATION	l:		0
BOILER MFG: PAWNI	E			BLR C	AP OUTF	PUT (BTU	IH):		6,900,000	-
UNIT MODEL: A-250				BLF	CAP INF	PUT (BTU	H):		8,265,000	_
COMMENTS:										
SCHEDULE										-
DAYS SCHEDULE NO: SCHEDULE COMMENTS:						MONT	H SECHE	OULE NO	•	1
PRES START: PRES STOP: REQ START: REQ STOP:	N: MON: 0 7 0 23 0 7 0 23	TUE: 7 23 7 23	WED: 7 23 7 23	THUR: 7 23 7 23	FRI: 7 15 7 15 15	SAT: 0 0 0 0				
MONTHS JAN: FEE	: MAR:	APR: I	MAY: JU	N: JUL:	AUG:	SEP:	OCT:	NOV:	DEC:	
ON:							\boxtimes	\boxtimes	\boxtimes	
CONTROLS										-
TYPE OF BLR C OPERATING TYPE OF BURNER C	SETPOINT:	PNEUMA		F or PSIG		RESET	CONTR	ROLS:	Y	
CONTROLS CO	MMENTS:									

PROJECT NAME: EEAP, FEASABILITY STUDY FOR INSTALLATION

CLIENT CONTRACT NO: DACA 01-94-D-0033

LOCATION: FT. RILEY, KS

EMC NO: 1406-001

DATE: 10/12/94

PREPARED BY: AJN/CWW

REFRIGERATION EQUIPMENT SURVERY OBSERVATIONS

BLDG NUMBER:			1		G NAME	CEN	INST B	DC			
PERO HOMBELL	: 7656			BLD	GIVAIVIE	GLI	4 1143 1 D	_DG			
REF. UNIT NUMBE	ER/TAG:	CH-1					LOCA	TION (M	ER#): N	IER	
								U'S SEF		HU-1,2	
	UNIT T	YPE RE	CIPROCA	ATING V	NITH AIF	R COOL	ED CON	DENSIN	3 UNIT		
NAMEPLAT	Έ										
CHILLER	MFG: T	SI					TOWER	MFG:	TSI		
CHILLER MO	ODEL: S	C2CD70				# OF	TOWER	FANS:			6
CHILLER SERIA	L NO:					1	OWER F	AN V:			208
CHILL	.ER V:		2	80		TOW	ER FAN	AMPS:			4.8
CHILLER A	AMPS:		1	35		TC	WER FA	N HP:			<u>1</u>
CHILLE	=			3							
CHILLER CAP (T	ONS):		73	3.8							
СОММІ	ENTS:										
SCHEDULE	·										
DAYS SCH	EDULE N	0:	61			MC	NTHS S	CHEDUL	E NO:	2	
SCHEDULE C	OMMENT	'S:									
	SUN:	MON:	TUE:	WEI	D: THU	IR·	FRI:	SAT:			
PRES START:	0	7	7		7	7 –	7 -	0			
PRES STOP:	0	23	23	7	23	23	15	0			
REQ START:	0	7	7		7	7	7	0			
REQ STOP:	0	23	23	2	23	23	15	0			
MONTHS JAN:	FEB:	MAR:	APR:	MAY:	JUN:	JUL:	AUG:	SEP:	OCT:	NOV:	DEC:
ON:	_	_			_					_	
	Ш	<u> </u>									
CONTROLS	;										
		ıs FU	=CTRIC								
TYPE OF	CONTRO		ECTRIC								
TYPE OF	CONTRO	INT:	ECTRIC		0		NWS SE				0
TYPE OF	CONTRO	INT:	ECTRIC		0		NWS SE NWR SE				0
TYPE OF CW	CONTRO	DINT:			0 P LITE H	C I: N	NWR SE	TPOINT:	DICATIOR	S:	
TYPE OF CW CW PF	CONTRO VS SETPO VR SETPO	DINT: DINT: EHI: N] T	EMP LI	0 P LITE H ITE LOW	CI I: Z V: N	NWR SE	TPOINT:	CATIOR	S:	
TYPE OF CW CW PF PRES	CONTRO SETPO RESS LITE	DINT: DINT:] T	EMP LI	0 P LITE H	CI I: Z V: N	NWR SE	TPOINT:	DICATIOR	S:	
TYPE OF CW CW PF PRES PRE	CONTRO VS SETPO VR SETPO RESS LITE SS LITE L	DINT: DINT: E HI: N OW: N GES: Y] T	EMP LI	0 P LITE H ITE LOW	CI I: Z V: N	NWR SE	TPOINT:	DICATIOR	S:	
TYPE OF CW PF PRES PRE	CONTRO VS SETPO VR SETPO RESS LITE SS LITE L ESS GAUG OLS COM	DINT: DINT:] T	EMP LI	0 P LITE H ITE LOW	CI I: Z V: N	NWR SE	TPOINT:	PICATIOR	S:	
CW CW PF PRES PRE	CONTROVS SETPO VR SETPO RESS LITE SS LITE L ESS GAUGO OLS COM	DINT: DINT: E HI: N OW: N GES: Y MENTS:] T	TEMP LI	0 P LITE H ITE LOW	CI I: Z V: N	OT	TPOINT:			

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

8 Nov-94

PREPARED BY:

CWW

CHECKED BY:

AJN

AHU-1,2 H&V - Hea VAV - Varia JH - Unit H N/A: N/A: N/A: N/A: N/A:	LOCATION MFG.: ting & Vntltng able Air Vol. leater OK: OK: OK:	FC - F RHT - IND - REPLACE: REPLACE:	an Coil (Indicate Reheat System Induction System	MODEL: 2P for 2 Pipe or)е)	
AHU-1,2 H&V - Hea VAV - Varia JH - Unit H N/A: N/A: N/A: N/A: N/A:	LOCATION MFG.: ting & Vntltng able Air Vol. leater OK: OK: OK:	FC - F RHT - IND - REPLACE: REPLACE:	an Coil (Indicate Reheat System Induction System	MODEL: 2P for 2 Pipe or)е)	
VÁV - Varia JH - Unit H N/A: N/A: N/A: N/A: N/A:	ting & Vntltng able Air Vol. leater OK: OK: OK:	RHT - IND - REPLACE: REPLACE:	Reheat System Induction System	2P for 2 Pipe or	4P for 4 Pig)е)	
VÁV - Varia JH - Unit H N/A: N/A: N/A: N/A: N/A:	able Air Vol. leater OK: OK: OK:	RHT - IND - REPLACE: REPLACE:	Reheat System Induction System	2P for 2 Pipe or	4P for 4 Pig)е)	
JH - Unit F N/A: N/A: N/A: N/A: N/A: N/A:	OK: OK:	RHT - IND - REPLACE: REPLACE:	Reheat System Induction System	•		,	
N/A: N/A: N/A: N/A: N/A:	OK: OK: OK:	REPLACE:	Induction System				
N/A: N/A: N/A: N/A:	OK: OK:	REPLACE:					
N/A: N/A: N/A:	ок:			DPR-ACT	OK:	RP- ACT:	
N/A: N/A:			SIZE:	DPR-ACT	ок:	RP- ACT:	
N/A:	TOK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
ALL NEW E	OK:	REPLACE:	SIZE:	DPR-ACT	OK:	RP- ACT:	
	QUIPMENT.					DPR-ACT = Damp	per Actuator
OOKS GO			***************************************				
	OS						
VA:	OK:	REPLACE:	SIZE:		THE STREET	STEEL TO SELL BOOK A	
				W. V			
						7.7.7.	
DK:	REPLACE	FAN BEARINGS:	COMMEN	ITS:			
)Κ:	REPLACE:		COMMEN	ITS:			
I/A:	OK:	COMMENTS:			V 2 44 33 1		
K:	REPLACE	FAN BEARINGS:	COMMEN	TS:			
)K:	REPLACE:	**************************************					
			· · · · · · · · · · · · · · · · · · ·				

						A1	· · · · · · · · · · · · · · · · · · ·
l/A:	iok:	IREPLACE:	ISIZE:	CNTLVLV	JIOK:	IDD ACT	RP-BD
l/A:	OK:						RP-BD
I/A:	ОК:						RP-BD
/A:	OK:	REPLACE:					RP-BD
	'				70.0		
			9.7				
						IA -OD - Vebigos E	and y
/A:	Jok:	REPLACE:	SIZE:	···			
/A:	OK:	REPLACE:	SIZE:				
-44		***************************************					
/A:	OK:	IMISSING:	IESTIMATE	D QUANTITY:			
The first of the control of the State of the Control of the Contro		·	The second second second second				
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	T	1	TECTION TE	D QUANTITY.			
	DK: DK: DK: DK: DK: DK: DK: DK: DK: DK:	OK:   REPLACE   OK:   REPLACE   OK:   REPLACE   OK:   REPLACE   OK:   REPLACE   OK:   REPLACE   OK:   REPLACE   OK:   DK: REPLACE:  DK: REPLACE:  DK: REPLACE:  DK: REPLACE:  DK: COMMENTS:  DK: REPLACE FAN BEARINGS:  DK: REPLACE FAN BEARINGS:  DK: REPLACE:  DK:	DK: REPLACE: SIZE:  DK: REPLACE FAN BEARINGS: COMMENDER:  DK: REPLACE: COMMENTS:  DK: REPLACE FAN BEARINGS: COMMENDER:  DK: REPLACE FAN BEARINGS: COMMENDER:  DK: REPLACE: COMMENTS:  DK: REPLACE: SIZE:  DK:	SEE PHOTOS  I/A: OK: REPLACE: SIZE:  OK: REPLACE FAN BEARINGS: COMMENTS:  OK: REPLACE: COMMENTS:  OK: REPLACE FAN BEARINGS: COMMENTS:  OK: REPLACE FAN BEARINGS: COMMENTS:  OK: REPLACE: COMMENTS:  OK: REPLACE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: SIZE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: SIZE: SIZE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE: SIZE: CNTLVLV  I/A: OK: REPLACE: SIZE:  DK: REPLACE: SIZE:  DK: REPLACE FAN BEARINGS: COMMENTS:  DK: REPLACE: COMMENTS:  DK: REPLACE: COMMENTS:  DK: REPLACE FAN BEARINGS: COMMENTS:  DK: REPLACE FAN BEARINGS: COMMENTS:  DK: REPLACE: SIZE: CNTLVLV OK:  DK: REPLACE: SIZE: CNTLVL OK:  DK: REPLACE: SIZE: CNTLVL OK:  DK: REPLACE:	DK: REPLACE: SIZE:  DK: REPLACE FAN BEARINGS: COMMENTS:  DK: REPLACE: COMMENTS:  DK: REPLACE: COMMENTS:  DK: REPLACE: COMMENTS:  DK: REPLACE: COMMENTS:  DK: REPLACE: COMMENTS:  DK: REPLACE: SIZE: CNTLVLV OK: RF- ACT:  AC: OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT:  AC: OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT:  AC: OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT:  AC: OK: REPLACE: SIZE: CNTLVLV OK: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- ACT:  BR- ACT: RP- A		

PROJECT: EEAP, FEASIBILITY STUDY FOR HVAC UPGRADE

CLIENT CONTRACT NO.: DACA 01-94-D-0033

LOCATION: FT. RILEY, KANSAS

EMC NO.: 1406-005

DATE:

FILE:

8 Nov-94

PREPARED BY:

CWW AJN

CHECKED BY:

7656.XLS

	BOILE	R & CON	<b>VERTER - HVAC</b>	UPGRADE OBSERVATIONS
BOILER/CONVERTER NO	).	BLR-1	LOCATION (RM)	MER
BOILER TYPE:		HW	MFG.: PAWNE	E MODEL: A-250
CONVERTER TYPE:			MFG.:	MODEL:
STM - Steam	STM/HW	- Steam to Ho	t Water Conv.	HTHW/STM - High Temp HW to Steam Convertor
HW - Hot Water	HTHW/HV	V - High Temp	o. HW to HW Cv.	DHW - Domestic Hot Water Convertor
BOILER BURNER	ATMOSP	HERIC:	POWER: X	OK: REPLACE:
COMMENTS:	MER HAS	BEEN RE-PI	PED.	
	BOILER H	IAS A REPAIR	R DATE STAMPED ON IT	AS 1/7/93
·				•
BLR PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
BLR PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
		•		
BLR INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
PIPE INSULATION	N/A:	OK: X	MISSING:	ESTIMATED QUANTITY:
COMMENTS:				>**
			****	
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: 3 HP
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP MOTOR	N/A:	OK: X	REPLACE:	SIZE: 3 HP
HW PUMP SEALS	N/A:	OK: X	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	ок:	REPLACE:	SIZE:
HW PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
HW PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
CV PUMP MOTOR	N/A: X	OK:	REPLACE:	SIZE:
CV PUMP SEALS	N/A: X	OK:	REPLACE:	SIZE:
COMMENTS:				
O GAMBLITTO.			<u> </u>	
	·· <del>······</del>			
CV INSULATION	N/A: X	Tok:	MISSING:	ESTIMATED QUANTITY:
CV PIPE INSUL.	N/A: X	OK:	MISSING:	IESTIMATED QUANTITY:
COMMENTS:		10,5	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
COMMEN 19:				
				<u> </u>

7656

BLDG: